AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

MAR 20 1939 MARCH 15, 1939



Polygonum Auberti

Garden Supplies Provide Extra Profit Polygonum and Some of Its Kin Plants Little Known in Nurseries Special Train to Portland

AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

F. R. KILNER, Editor Published Semi-monthly by

AMERICAN NURSERYMAN PUBLISHING CO.

508 S. Dearborn Street,
Chicago, Ill.
Telephone: Wabash 8194
New York Office—67 West 44th Street
N. L. Huebsch Tel., Murray Hill 2-4871

Entered as second-class matter December 14, 1933, at the post-office at Chicago, Ill., under the act of March 3, 1879.

SUBSCRIPTION PRICE. \$1.00 per year; outside United States, \$1.50. Single copies, 10c.

ADVERTISING RATES on application. Forms close on 10th of month for mid-month issue and on 25th of previous month for first-of-month issue. If proofs are wanted, copy should be on hand one week earlier.

TABLE OF CONTENTS......Page 32
INDEX TO ADVERTISERS.....Page 34

SPRING SALES.

Frequent assertions have been made by nurserymen in recent years that more attention is due to the selling of nursery stock than to its production. The thought is present in the minds of many more, a good many of whom rest in the hope that someone will find a way out.

But it is not so easy as that. No outside or coöperative agency will ensure that you individually will sell all your stock and at a profit, any more than the results of research at our experiment stations make it certain that you will harvest an abundant crop of high quality.

Just as each grower must tend closely to the cultivation of his own fields, so each nurseryman must devise methods to make sales of his stock.

With the busy gardening season close at hand, attention is demanded to this matter if the best returns are to be obtained. Don't be content to let the public come to you for plants. Go out after customers. Make plans to push sales. What you do yourself is more important to you than what anyone else can provide in assistance.

FREEDOM OF TRADE.

In the centuries old countries of Europe, mountain ranges and unbridged rivers formed physical barriers when transportation was slow and commerce was undeveloped. Those barriers became national boundaries and have persisted up to the present, with consequences that are all too apparent today.

In this country, rivers and mountain ranges formed few of the bound-

The Mirror of the Trade

aries of our states as they were set up. Across the flat areas of the country the state lines were largely arbitrary. But since then, in numerous instances, governmental authorities have set up artificial trade barriers as troublesome as the physical ones of the old world.

So numerous have such instances become that they have demanded attention from those who seek freedom of trade. The conference of state governors has given the matter particular consideration. In this issue account is given of a special report on the subject by the bureau of agricultural economics to the Secretary of Agriculture. The phase that concerns nurserymen was the subject of detailed discussion at the meeting of scientists at Richmond, Va., in December and of the meeting of state regulatory officials at Washington, D. C., last month. The special committee of the A. A. N. on trade barriers, appointed last year, has done notable work in bringing the problem farther out into the open.

The Council of State Governments, which will meet in Chicago, April 5 to 7, has called a conference on the subject of trade barriers, following up the declaration of the governors' conference last autumn.

Since so much concentrated thought has been brought to this subject in recent months, the time seems here when nurserymen should persist that a solution may be found.

SETTING A NEW HIGH.

This number of the American Nurseryman carries the most advertising of any issued since the new management started to bring the publication out of the depression six years ago. Whether that is an indication of nurserymen's activity in buying for a banner spring business, or whether it reflects the progress in building up the magazine, it is noted with equal satisfaction. It accompanies an all-time high in circulation, as well. From a business point of view, the result is summed up in this recent statement in a letter from an advertiser: "We have received many excellent returns from our advertisements in your magazine and consider it a vital part of our advertising program."

POLYGONUM AUBERTI.

Polygonum Auberti, one of the more useful and ornamental members of the smartweed family, is known under the various names of silver-lace vine, fleece vine, Chinese fleece vine and lace vine. It is a hardy and fast-growing vine, valued for its graceful growth and loose clusters of white flowers in late summer.

This climber, with its fragrant greenish white flowers, is excellent material for covering a fence or trellis. In late summer and early autumn the small white flowers, which grow in long erect or drooping clusters near the top of the plant, are produced in abundance, sometimes completely covering the plant. These features, combined with the 2-inch to 3-inch oval leaves, make a vine that is a beautiful cover for most any situation where a climber is desired.

The cover illustration of P. Auberti, while showing in some detail the flowers, leaves and fruit, is hardly characteristic of the plant in that it does not show the profusion of blooms near the top of the vine. So numerous are these blooms that the leaves are often obscured from view.

P. Auberti, if pruned carefully when necessary, can be trained on the same trellis or other support with climbing and pillar roses. The abundant masses of white flowers, which take on a pinkish tinge as they age, will provide a second profusion of blooms after the roses.

This vine is neat and slenderstemmed, but is quite capable of rapid growth, and it will make a showing in a short time that is equaled by few climbers. When given a branched cedar pole for support, it soon piles upon itself and forms a large, informal mass. It can be trained to grow over a thin or scraggly tree, or to clothe a stump.

This polygonum is perfectly hardy and thrives in ordinary soil, though it prefers loam and full exposure. The literature recommends it as being hardy from Pennsylvania, southern Illinois and Missouri southward. However, it has been known to survive winters that are not too severe as far north as Chicago.

Propagation is by seeds or divisions of the plant.

AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

The Chief Exponent of the American Nursery Trade

The Nurseryman's Forte:
To Make America More Beautiful and Fruitful

VOL. LXIX

MARCH 15, 1939

No. 6

Garden Supplies Provide Extra Profit

The Sales Building That Features the Up-to-date Retail Nursery Has a Display Room Offering Garden Supplies and Equipment to Customers

To welcome the many motorists who drive out to neighborhood nurseries to pick out plants to carry home to their gardens, sales buildings or display rooms are becoming an essential part of such retail enterprises. In numerous instances these have become actually retail garden shops, for the reputation and prestige which draw customers for their perennials, shrubs and trees act also as a recommendation of garden tools, supplies and equipment that nurserymen offer for sale.

The public has come to realize that by selecting growing plants and paying a better price for them at the nursery, it is more certain of gardening success than buying through channels not specially equipped to handle nursery stock and without the personal backing of the grower. The automobile has made easy the access to the neighborhood nursery—often it is nearer than a downtown store.

Then, too, the buyer can get valu-

able information about planting and caring for the stock at the time he or she buys it. The nurseryman is a successful grower-his livelihood depends on that-so what better authority on the subject can the amateur gardener find? The nurseryman keeps abreast of the times, knows the best varieties and the latest introductions in plants, has first-hand and practical information regarding insecticides, fungicides, spraying equipment, fertilizers and the endless variety of things that are components of the garden or needed in gardening operations.

Not only is the nurseryman better posted on gardening than a store clerk could be, but he is there to "take it" if his advice does not lead to success. So he must be careful and accurate in his recommendations. Because of that, his prestige with the gardening community is high, and his recommendations carry the weight of the well informed.

Another good reason for the neighborhood nurseryman carrying a display of garden merchandise for sale is that it brings customers back again. Perhaps when they make a purchase of plants early in spring they do not have the foresight to provide themselves with clippers, sprayers or what-not. In a few weeks they are back, recalling that they saw these tools in the nursery sales room. This may be repeated throughout the summer, as insect raids or garden problems occasion new demands. At such time the customer may see roses or other shrubs blooming in pots, perennials that may be moved to make an immediate show in the garden, shrubs in bloom or trees in foliage that are noted for purchase another season. By bringing the customers back to purchase garden supplies, the nurseryman has the opportunity to sell them more nursery stock.

Moreover, there is created a bond



Sales Building of Kansas Nursery with Air-conditioned Office and Storage Cellar in Rear.

of good-will between the amateur gardener and the nurseryman as professional guide. Their common interest is developed, and the enthusiasm for gardening which is aroused in spring may be sustained through the growing season, instead of abating or lapsing altogether as summer advances. The continued contact which the service garage affords the automobile sales agency with its customers is no more valuable than the bond maintained between the nurseryman and his customers by the sale of the things needed for garden maintenance.

At the same time, there is a profit to the nurseryman in dollars and cents on the merchandise he moves. If the buyers understand that he displays only recommended merchandise, there is little sales effort needed. As the amateur gardeners realize their needs, they seek this dependable source of supply.

The extent of the wares offered by the nurseryman depends upon the space available in his display room or sales office. He stocks staple lines, not knick-knacks or novelties that are on the counters of drug stores and hardware stores. What he offers should be of the best, because it bears his recommendation. He will not stock all brands of insecticides, but those he recommends for various purposes. Tools are all of substantial and durable character, not the 10cent store variety.

A rack of packet seeds of high quality may be installed early in spring. Gladiolus bulbs in cellophane packages are easily handled. Lawn seed of the best grade should be an important item, because trees and shrubs sold by the nurseryman are enhanced, or the reverse, by a lawn they border. In some cases, flats of annuals are offered, as well as house plants in pots.

Garden tools are important, from the trowel and watering can to lawn mowers and lawn rollers if the line is extensive. Grass clippers, pruning knives and shears, hedge trimmers, turf edgers, rakes, spades, plant supports, labels and markers, lawn sprinklers, rubber hose, nozzles, hose reels and gloves are among representative items. Fertilizer spreaders, tree pruners and saws, gazing globes and weed killers are other possibilities.

Sprays for the various types of garden insects form an important line, as well as dusts and sprays for the fungous diseases that cause trouble. Supplementing these should be sprayers and dusters of small size at such moderate price as is consistent with good quality.

As the line of merchandise expands, garden ornaments may be included, such as bird houses and bird baths, trellises, decorative markers, garden pottery and furniture, per-

haps stone for rockeries.

Fertilizers are better indicated by display placards than stocked in the sales room, for few are without odor. Here the recommendation of the nurseryman is usually required, so that the order is easily written without showing the merchandise. Peat moss is an important item, as most home gardens need it either as a mulch or to lighten the soil.

In choosing his stock, the nurseryman should be well informed on what is available and choose merchandise which will be worthy his recommendation and enhance his prestige as a professional guide. Sources of supply, if not known to any reader, can be learned by writing to the editor of this magazine.

ERNST NURSERIES.

Six years ago, when a branch office of the Ernst Nurseries was opened at Muncie, Ind., an attempt was made to render the buying of nursery stock more attractive to customers. In the realization that the trend today is toward personal sales by means of the automobile, adequate parking space was considered a prime requisite in the nursery layout. Accordingly, fifteen acres of land, just two miles from the city limits, were laid out along a state highway with a Ushaped drive giving easy access to the office building and nursery, as is shown by the upper left view in the accompanying group of illustrations. This is a good close-up view of the entrance and drive.

Space on this driveway, as well as along the entire west side of the building, permits ample parking. A lane continues around to a service court in the rear, where plants may be loaded into automobiles with ease. Adjoining this court are blocks of sizable evergreens in numerous varieties, heeled in for quick sales, as shown in the upper right picture.

Wide paths between the blocks re-

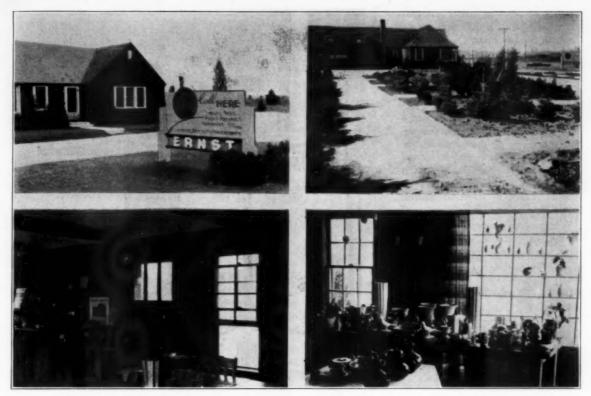
ceive a coating of sawdust each spring in order to make walking easier. For those customers who wish to drive into the field to select plants, a single-track roadway has been provided. Stock has been planted in small blocks in the field to facilitate the taking of inventory and to aid frequent check-ups in preventing the accumulation of large surpluses.

Framing the graveled drive along the highway is a smooth lawn, which leads the eye to the brown frame office structure with a conservative evergreen planting around its base. Inside are private offices and sales, or display, rooms. The picture at the lower left shows one view of the display room, and the picture at the lower right is another view of the same room showing the display of pottery. These two views also reveal the construction of the inside of the office.

The commodious display room is paneled in pecky cypress, the wood being laid in vertical strips and left without varnish or other finishing treatment. The rough beamed and plastered ceiling blends harmoniously with the wall finish, and together they form an attractive background for the brilliant pottery and glass and the decorative metal flower stands in the room

Glass shelves, holding pottery and potted plants, are supported by metal brackets at the large windows which meet at one corner of the room. Homespun drapes in tones of orange and brown frame the two windows and are in keeping with the electric fixtures, which are of simple early American design, with wide-spreading metal shades. Plain wooden shelves behind a paneled counter hold bags of grass seeds and turf builder in season.

Painted labels in the perennial garden have been completed and have proved a great help in retail selling and also in taking inventory. The labels are of sheet metal, measuring 3x5 inches, and are supported by a 24-inch rod. These are driven into the ground at a corner of each perennial block, projecting high enough to make the sign readable without stooping. The labels are tilted backward, also, to facilitate reading. Letters are black on an aluminum background. Retail prices are added to the labels in pencil before the spring trade begins each year.



Views Inside and Outside Sales Building of Ernst Nurseries, Showing Attractive Display of Merchandise.

The perennials occupy a frontage of about 100 feet along the state road, and the garden has been considerably enlarged this year to accommodate new varieties. It now extends some 300 feet back from the highway. An attempt has been made to keep the low-growing plants toward the front, grouping the taller flowers away from the road, so that passing motorists may gain a comprehensive view of the whole area. An overhead sprinkling system has been set up at 50-foot intervals and will cut to a minimum any loss from drought.

Not to be outdone by these sales appeals, the landscape design department has been making colored plans and elevation sketches of houses planted, showing the proposed foundation plantings in place. This service, at a modest cost, has been offered to other landscape men and, where used, has proved of great value in selling a landscape job. When a client has seen a sketch showing forms, colors and proposed locations of the plants he is purchasing, he does not feel so much in the dark about his buying. Most clients wish to have the sketch to frame for

their home; when the planting is completed, the colored plan, drawn to scale, is given to the client as well. No names of varieties are included on the rendered drawings, the estimating and selling being done by referring to an accompanying typewritten list of plant materials, which the salesman does not surrender until the job is sold. If the piece of work is large enough to warrant the expense, a blueprint is then drawn up, including names and sizes of plants.

Seven years ago land where the nursery now stands was farm area; today it supports a business employing a force varying from twenty-five to fifty persons, including experienced workmen in plant materials, an office force composed of young people trained in an accredited business college, and a design department having two university-trained landscape architects. It is equipped to handle landscape work of all descriptions, including spraying, pruning, large tree moving, designing, planting and construction work of all kinds. A comprehensive service, which makes every customer a repeat customer, is being aimed at, with new emphasis on maintenance. Complete service is offered, from the design of property through its planting, as well as year-around lawn, shrub and tree maintenance. The mailing of periodic landscape letters help customers appreciate better landscaping.

Educating the public is to become one of the nurseryman's chief duties in the future, believes Devol Ernst, so as to teach customers the difference between good and bad design, between good and bad merchandise and between good and bad workmanship. This education, besides monthly landscape letters, may take the form of catalogues as veritable handbooks on all phases of landscape work, newspaper articles, better display advertisements, periodic letters of advice and instruction to builders of new homes, illustrated talks to organizations, colored motion pictures and other media.

SHOW PLANT PICTURES.

Pictures of plants showing their flowers in natural colors are of inestimable value in making sales of dormant stock. Particularly is this true with regard to roses.

Using a cleverly constructed revolving stand, carrying pictures of 200

varieties of roses in color, arranged numerically and alphabetically, the Germain Seed & Plant Co., Los Angeles, Cal., stimulates early sale of dormant roses. An illustration like that on this page, showing the stand, was used recently in the Downtown Shopping News, together with a sectional view of the Hill street store's rose department. The bins in the store containing the dormant roses are numbered, so that stock may be located quickly. Further publicity was given the rose chart through its use by William Clark in a recent address before the Pacific Rose Society.

Where a limited number of varieties are sold, the pictures might be mounted on placards to be hung on the wall or set on stands. The customers' ability to make their own selections saves the time of salesmen in booking orders.

LONG ISLAND CLUB DAY.

The seventh annual garden club day of the Long Island Nurserymen's Association was held at the Garden City hotel, Garden City, N. Y., March 1. At the business meeting held in the morning the main feature was a discussion of the problems of community nurseries and their interference with the business of legitimate nurserymen.

Approximately seventy guests, all members of garden clubs, were present at the afternoon session. The guest speaker, Charles Downing Lay, land-scape architect, Hortus, Inc., New York, told of the progress made to date of Gardens on Parade at the New York world's fair. He told of the difficulties encountered and what the visitor will see when the fair opens.

Paul Vosberg showed a small part of his large collection of colored slides and gave comments on them.

The meeting closed with a question box conducted by George E. Hart. Questions were answered by a board of experts consisting of Henry Hicks, Jac Bulk, Peter M. Koster and G. Clifton Sammis.

OUTDOOR LIFE SHOW.

The second North American sports, garden and outdoor life show, which opened February 17, at the Armory, Baltimore, Md., saw the nursery trade well represented by many prize-winning exhibits.

Towson Nurseries, Inc., Towson,



Revolving Stand of Rose Pictures Aids Customers' Selections.

Md., was represented in the garden section with a delightful outdoor living room named "Azaleas and Rhododendrons at Home." The background was of hemlocks, pines and cedars, rhododendrons, azaleas and double-flowering peach, with ferns, cypripediums and spring flowers surrounding an inviting bench at the end of a path edged by andromedas and perennials. Towson Nurseries, Inc., was also represented by a woodland scene of perfected detail, "Flame on the Mountain." In the background, rocks were arranged realistically with a mountain stream, dead leaves and gnarled logs, while laurel and rhododendrons in luxuriant bloom completed this unusual exhibit. Both the Towson exhibits received blue ribbons.

A delightful atmosphere of the outdoors was developed by the Warner Landscape Service, Baltimore, in the class "Beside a Spring." On the left was a woodsy spring, with ferns, wild flowers and dead leaves. At the extreme right was a tumble-down stone springhouse with aged shingles, also spring flowers, white lilac and blooming shrubs, with a leafless tree and pines and cedars forming a background. Mr. Warner won a blue ribbon in this class.

Andrew Simmon, landscape architect, Towson, exhibited a charming alpine garden, with moss-covered rocks edging a tiny mountain stream that trickled into a deep rocky pool. Alpine plants, azaleas, primulas, columbines and a background of tall pines and hemlocks brought a blue ribbon to this exhibit.

Philip B. Welsh & Sons, Reisterstown, used a space of 430 square feet to depict "Springtime," using a background of pines, cedars and hemlocks. A pool edged with daffodils, an artistic arrangement of spring flowers, tulips, hyacinths, bluebells and flowering shrubs brought a blue ribbon to this firm.

The Shipleys, Towson, who specialize in alpine plants and perennials, presented "Where the Columbine Grows." The background of hemlocks and cedars extended in a semicircle, and in this nook was a lovely pool, with columbines, alpine plants, crape myrtle and perennials artistically arranged. A blue ribbon was awarded to this lovely arrangement.

TWO greenhouses, 25x100 feet, are being erected on the property of the Ernst Nurseries, Yorktown pike, Muncie, Ind.

Polygonum and Some of Its Kin

Second and Concluding Article on Smartweeds, a Family Which Contains Plants of More Than Ordinary Ornamental Value — By C. W. Wood

In addition to polygonum, which we examined in the preceding issue, the buckwheat family contains several other genera of garden value, some of them being quite out of the ordinary and, therefore, of value to the grower with a clientele of novelty seekers. Speaking from the systematists' point of view, the genera most closely related to polygonum are the docks and the true buckwheats. The latter are of little or no interest to the ornamental gardener, of course, and the docks, being mostly weeds or economic plants, are not often thought of in a decorative sense, but two or three might find a place in our work.

Rumex occidentalis, from the west, is the only native species that I recall at present which has much to offer the gardener, and it is quite dock-like in appearance, though it does have a pleasing appearance during the fruiting season, when it displays its showy calyces on 3-foot stems. Another species, R. roseus, growing naturally from Egypt to Persia and, therefore, only suited to the warmer parts of this country, is said to be of value for the same reason. Perhaps the most ornamental of all the available docks is R. Hydrolapathum, of Europe, which gives a bold, tropical effect when planted in moist places, as along stream banks, where it can get its roots in water and send up its lofty stems to a height of five or six feet. Its great stature and luxurious leaves, up to two feet in length and broadly oblong-lanceolate, are its main attractions.

We enter an entirely different atmosphere when we step from the docks into another branch of the buckwheat family, the eriogonums of western North America. The differences exist not only in the general make-up of the plants, as in the generally woolly leaves in eriogonum. but in their ornamental value as well. In rumex we have to look long for a species that deserves garden space, but in eriogonum one does not have to go far to see how fine a buckwheat can be. Naturally, one should expect to find a few poor plants in a genus of 150 or more distinct kinds, but of the fifty or so that I have grown

there has been none, except a few annuals, that I should not be glad to give garden space. They are valuable not only for their beautiful woolly leaves and for their ease of culture (many of them are near-desert plants that are easily suited in a dry soil), but the most ingratiating feature to me is the summer-blooming habits of many of the species. Neighborhood growers will, I am sure, find much valuable material in the groups. I shall mention only a few kinds, restricting descriptions to the ones that are likely to be the most readily available, but interested growers are urged to try any others which may come to light from time to time. They are little-known plants, seldom appearing in lists, and the best of them may not yet be in commerce.

The one eriogonum that seems to have got around much among gardeners is E. compositum from the northwest. It makes a mat-like shrubby growth of densely woolly foliage, which is ornamental in itself, and starting in July, its compound umbels of usually pale yellow flowers (it varies from seeds from different parts of its range from cream through yellow to pink) add the finishing touches to a really good plant, but that is only half the story, however, for it usually continues in flower until heavy frosts cut it down.

Type E. heracleoides is a good plant for a dry sunny slope, where it will clothe the soil with a 15-inch wide mat of leaves, green above and silvery, downy beneath, and all during the summer it will add for good measure its offering of masses of creamy yellow flowers. Even better. though, is its variety rosea, which has replaced the former's creamy flowers with a splendid shade of pink. I have not grown the latter from seeds and should not expect it to come entirely true, but it, like others of its kind, may be increased by layering and no doubt from cuttings.

A plant that I have had from three or four sources as E. ovalifolium is about the best of the lot if small size is stressed, though that is not its only recommendation by all means. McCully speaks of it as growing two

inches high when found at 12,000 feet on granite peaks in the Sierras, but my material has been about double that height, but still makes dense, silver tufts of leaves and spreads out its compact, woolly heads of pink flowers all summer long. It has a reputation of being rather finicky under eastern conditions, but that must be founded on trials in heavy soil, for I find it easy to grow and permanent in a soil made up mostly of sand and in full sun. It is a splendid rock garden plant and will surely become popular when better known. Its variety depressum is spoken of as forming "rosettes of round, felt-like leaves that tint handsomely in fall, while numerous heads of lemon-yellow flowers, fading to pink, are carried throughout the summer." All of which sounds like variety depressum would make a good garden plant if we could only get it.

A little bushy shrub, to a height of eight inches, with tiny leaves covered with silvery down and large heads of pink flowers during midsummer, which I have had under label of E. niveum, is one of the joys of the race. If the old saying which tells us that "beauty is as beauty does" is true, this plant is about perfect, for I recall no other at this moment that can be so lovely under the adverse conditions which seem to make niveum its best. Get it established in a meager soil in full sun and it will make a lifetime ornament of far more than ordinary merit.

Two years ago I received an eriogonum from a Washington grower under label of E. umbellatum which I have come to think well of. It makes a compact bushy growth about six inches high, clothed in deep green leaves, and carries deep yellow flowers in summer. That makes a splendid plant, but its beauty does not cease when the flowering period ends, for with the approach of winter the leaves take on the most bewitching shades of red, mahogany, etc.

Although eriogonums are now quite unknown in gardens, especially in the east, I bespeak for them a hearty welcome when gardeners come to know them. It is unnecessary to dwell here further on their merits, but I should like to urge all interested in summer-blooming plants to try the genus as it becomes available.

Because one of the rheums, R. Rhaponticum, is known to all gardeners as a vegetable garden plant, the entire genus seems to be put in that category in the popular mind. And thereby we are missing one of the most impressive of hardy plant groups-a genus in which luxurious, tropical-looking foliage is combined with the impressiveness of their towering flower panicles. Even the common rhubarb is a good ornament, especially in a moist spot, as at the margin of a bog garden, where it takes on a special luxuriousness in the deep, rich, moist soil of those quar-

Far better, however, is Rheum emodi, from the subalpine regions in the Himalayas, which may grow as high as ten feet under good culture. Its large leaves have a dull coppery sheen, giving the plant a peculiar charm, and its purple flowers in spreading panicles add the finishing touches to an out-of-ordinary plant. I have always eventually lost it during the winter in northern Michigan, no doubt because it is slightly tender for this climate, but I should expect it to be hardy in all except the coldest parts of the country. The latter is also true of R. Ribes, which I had in seeds from a missionary in Persia a few years ago. It grew about four feet high, with rather heart-shaped leaves about a foot across, but its most showy character was the fluttering clusters of blood-red fruits all during late summer. If seeds could be found, I believe this would make a good item for growers of novelties, especially for neighborhood growers, as the large roots would make it quite prohibitive to handle clumps by mail. There are twenty-five or more species of rhubarb, some of which, as R. inopinatum from Thibet and R. nobile in addition to the ones mentioned before, should be brought into cultivation. They are propagated from seeds without difficulty, or by division of the roots.

Judging from the little experience I have had with atraphaxis, I am of the opinion that some of the species would make good property in the hands of neighborhood growers. That opinion is based on the facts that the plants are rare in America

and that all, so far as I know, are summer blooming. I know of no American source of either plants or seeds, and seeds are not easily found in Europe. They are of small shrubby growth, seldom over two feet high, with clusters of white or pink flowers, which remain attractive over a long period, owing to the enduring calyces. The three kinds that I have had, all from Greece and northern Africa, have proved to be not hardy in my climate, but if one could get A. Muschketowii, from Turkestan, with white flowers and showy red anthers, A. spinosa, from Siberia, and others from the cool parts of their range, it is not unlikely that hardy material would come to light, for Rehder speaks of them as being hardy in the north. They come readily from spring-sown seeds if they are kept on the dry side and are also said to strike well from greenwood cuttings under glass in early summer.

Few of the muhlenbeckias are suited to the harsh climate of northern Michigan, and not many would be hardy north of the Ohio. Aside from two or three kinds used by florists, such as M. platycladum (usually known as a coccoloba), they seem to be little known in this country, though the hardier kinds, like M. complexum and M. adpressa, should be acceptable for covering hot, sunny slopes in the warmer parts of the country. So far as I know them, they are evergreen, creeping, or climbing shrubs, their dark green leaves and brown stems being their most ornamental feature, though their small pinkish flowers in the leaf axils add something to their garden value. Propagation is by seeds in spring or by cuttings under glass in early sum-

THE marriage of Charlotte Koster to John Springer White has been announced by her parents, Mr. and Mrs. Peter M. Koster. Mr. Koster is manager of the Bagatelle Nursery, Huntington Station, Long Island, N. Y.

REPORTING business good, George F. Verhalen, of the Verhalen Nursery Co., Scottsville, Tex., states that many varieties of roses are already sold out of the Tyler section. The demand for evergreens is heavy. Though the weather is bright and fair, forest trees have not yet started to grow, which means the season is starting two to three weeks late.

SHORT ROWS

Rothomogensis-those thirteen letters use up a lot of your time, and that of the folks you pay wages to. You have to fight it all the way through the year-the stake at the end of the row, the catalogue proofreader, the typist worrying out your letter, on labels and invoices-to say nothing for your long-suffering customer who just wants "one of those deep-pink lilacs" and mayhap gets the "same old pale lavender." So what? Let's give it the plain English-say "Sally Rand" -or plain "Sally"-or you pick one anything so it's fast to write and spells easy-like. By the way, are we both talking about Syringa chinensis

* * * * *

Executive Secretary Richard P.

("Dick") White continues to receive well earned applause for the realistic and forceful manner in which he conducts his office. The "founding fathers" of the reborn A. A. N. did a handsome piece of finding when they went out in the tall timber and ran down this dynamic and personable executive to place at the hub of the wheel.

* * * * *

Back in 1926 the Ohio nurserymen, headed by A. G. Bookwalter, of the Berry Hill Nursery Co., put into motion the idea of district nursery schools to which nurserymen would send their propagators and foremen to learn the latest in methods, by contact with the professional researchers and by mutual exchange of experience. The American Nurseryman has been asked what is known of the results. Will some Ohio reader supply the information?

* * * * * "Ten-o-seven" is a sound you heard frequently around the corridors at the recent meeting of the Minnesota nurserymen at Saint Paul. In fact, you've heard it up there at the headquarters of "Ol' Man River" for several years past. It's the identification of that new winter apple "invented" by the Minnesota fruit breeding farm. Dr. W. H. Alderman, head of the farm, has been showing the fruit for several seasons; the tree has been put through all of his rigid IQ's, and he says that according to the rules it is about ready to exchange its number for a name (the Minnesota boys are all for naming it "Alderman").

Plants Little Known in Nurseries

Desirable Species Not Commonly in Cultivation Recommended for Trade's Attention, at Indiana Meeting—By Willard N. Clute, of Butler University

There are still many desirable herbs, shrubs and trees that have not become common in cultivation in this country because nurserymen have been too busy with well known plants to worry about introducing new ones. The task of making these familiar to the public must be left to the plant breeder, the intelligent amateur and the occasional cultivator with an eye to superior forms.

Foreign countries, especially England, grow a much larger number of species than we do, and we may find many forms ready developed for our market. Others may be obtained from the botanical gardens in this and other lands. Most of these gardens send out seed lists, but the species are usually listed under their technical names without descriptions, and one has to be something of an expert to select the superior forms. Our own woods and fields, however, often yield interesting material. One has only to recall Bechtel's crab, the cut-leaved sumacs, the golden glow and the multitudes of color variations to realize the possibilities in this di-

Many others remain to be discovered in the nurseryman's own stock. It is beginning to be realized that most plants have more determiners for variation than can be expressed at one time, and these can be brought out by changes of soil, climate, sun, shade and other features of the habitat. The common yellow daisy, under such treatment, has been turned into a considerable number of red forms, illustrating the well known fact that cultivation may greatly change a plant. Some time ago we made a collection of living forms of goldenrod for study, but after a year or two in the garden, they had ceased to be like their relatives in the wild.

In selecting stock for propagation, it is worth while to take cuttings from the best plants. Too often a thousand cuttings of a kind are simply a thousand twigs from the desired variety without any care in selecting. An interesting illustration of what may be done by selection is found in the Hemlock Arboretum, near Philadelphia, where nine species of hem-

lock from various parts of the world have produced no fewer than 150 varieties, and all this through mere variation and not hybridization.

When it comes to herbaceous material we have continued to ignore native plants close at hand. Our midwest spiderwort, Tradescantia reflexa, is far superior to the eastern T. virginiana and may be had in a number of color forms. Phlox bifida, native to Illinois, Indiana and some of the border states, grows wild in sandy soils with flowers that range from white to pink and blue. Phlox argillacea is another species from the vicinity of Lake Michigan, whose silvery lavender blooms always open in time for Memorial day. A form of dogtooth violet with thirty-six petals to each flower is found in the wild in Illinois, and double trilliums are not uncommon. A form of Solomon'sseal, found near Gary, Ind., has many branches. A violet, known as the March violet, probably a hybrid, which blooms before St. Patrick's day, grows in round clumps often a foot across, with so many flowers that the stems are completely hidden; often there are 500 blooms to a clump. And so it goes.

As to shrubs and trees, we have listed more than a hundred rare though desirable species, but it is not intended to inflict you with all of them here. We may, however, take a few into consideration, among them the following:

Hamamelis vernalis, the spring witch hazel, showed its first flowers January 10 this year and is seldom later than the middle of February in any year. The bright yellow flowers often shining above the snow, are worth going some distance to see.

Hamamelis mollis is another early bloomer, said to be the best of the Asiatic species.

Corylopsis, having several species with fragrant yellow flowers in racemes, blooming before the leaves, is related to the witch hazels.

Lonicera Standishii is the first of the honeysuckles to bloom. Reported tender in our region, it has lived for fifteen years in northern Illinois.

Rosa canina, the dog rose, is a not

uncommon escape from cultivation and is mentioned here because it has inch-long fruits that remain a vivid red throughout ordinary winters.

Genista scoparia is the "planta genista" that gave the name to a long line of English kings. Its deep green, leafless stems make close little thickets and light up the garden in winter. The yellow flowers are large, pea-shaped and produced throughout the summer.

Laburnum anagyroides, the familiar golden chain, with pendulous racemes of yellow flowers in early summer, is well known and rarely planted, though it deserves to be.

Davidia involucrata, the dove tree, is related to the dogwoods, but has a single white bract, six inches or more in length, which makes the tree in bloom look as if a flock of doves were resting there.

Cornus mascula, the cornelian cherry, though well known, is seldom planted. It has clusters of bright yellow flowers in early spring and an abundance of cherrylike edible fruits in midsummer.

Cornus officinalis does not seem to be in the trade. It is much like the preceding, but the flower clusters are surrounded with four yellow bracts, as in the flowering dogwood.

Cornus Kousa is an Asiatic species familiar to all by name, but rarely seen in bloom. Flower clusters are like those of our flowering dogwood Cladrastis lutea, the virgilia, resembles the ash tree in appearance, but has smooth gray bark like that of the beech. The flowers are peashaped, cream-colored and in large custers in early summer.

Sophora japonica, the scholar tree, is a tall pyramidal tree, with pale yellow flowers in clusters in early summer.

Sophora viciifolia, a striking shrub with pinnate dark green leaves and pink and blue pea flowers, is rarely seen in cultivation.

Colutea arborescens, a member of the legume family, is often cultivated, with insignificant flowers, but inflated fruits of unusual appearance, red in color

Oxydendrum arboreum, the sour-

wood, is a southern plant hardy as far north as Indianapolis. The flowers are like those of the lilies of the valley, in clusters, and the foliage is brilliant red in autumn.

Prunus pumila, the sand cherry which grows wild along Lake Michigan, has long wandlike branches, covered with white flowers in spring. Fruit is edible. The plant is a good sand-binder.

Robinia viscosa, a southern tree that has become naturalized in various parts of the north, has flowers like those of the common locust, but pink white in color. The twigs are sticky, but not annoyingly so.

Ribes gracilis, a wild gooseberry, is among the first to become green in spring. It is desirable for planting on the borders of woodlands for its springlike appearance.

Spiræa arguta is the best of the early spiræas. Under good conditions it is a solid pyramid of white while in bloom.

Syringa japonica, a tree lilac, often attaining a height of thirty feet, has large clusters of white flowers early in summer.

Syringa parviflora, a small species with red buds and pink blooms, flowers from seeds the second year.

Hypericum species comprises a number of nearly evergreen plants with round yellow flowers all summer. It is dedicated to St. John and supposed to protect the owner from all evil spirits!

Chænomeles Wilsonii, a low-growing quince often confused with the species usually called C. japonica, has many orange-red blooms that appear with the leaves.

Chænomeles umbilicata is another quince confused with the common kind. Flowers are blood red; fruits are large, yellow when ripe, extremely acid.

Prunus Mume, Japanese apricot, blooms early in spring. It is the thorniest plant in cultivation.

Salix Matsudana is a willow with crinkly twigs that look as if the tree might be a climber. It is astonishing rather than useful.

Lonicera thibetica has dark green leaves and purplish sweet-scented flowers in early summer.

It was suggested that the nurseryman might improve his sales by putting more goods in the window; that is, by planting single specimens of each kind along some road through the nursery, with name and price attached, so that visitors can find out what kind of plants are in stock. In the ordinary nursery many specimens are so far away from the center of things that the prospective customer, unfamiliar with the names in the catalogue, decides to omit various plants because he has no time to look them up.

PROTECT OREGON AZALEAS.

Early spring on the Pacific coast sees a long cavalcade of motorists en route to Brookings, Ore., and other tracts along the southern coast of the state to view the fields of native blooming azaleas with their rainbow of colors and their intense fragrance.

The azalea, Azalea occidentalis, is a native of the Pacific coast region, and these fine plants abound along the Oregon coast, particularly in the southern part of the state, and extend down along the northern part of the California coast. Their blooming season, beginning in May, extends over a longer period of time than most native blooming shrubs.

Through extensive work on the part of the Oregon Association of Nurserymen to protect and perpetuate these azaleas, the state of Oregon last spring, recognizing the value and importance of these azaleas, set aside a tract near Brookings, Ore., as a state park. This grouping is believed to be one of the finest and most accessible of any of these native azalea tracts. There is no disease whatever apparent in these natural plantings, according to Frank P. McWhorter, plant pathologist at the Oregon experiment station. In the park east of Brookings and in meadows along the highway a short distance north of Port Orford the azaleas are of an unusually large size, which indicates a long-continued growth in a perfect state of health. The immediate problem is to maintain this state of health, which, in view of other localities and other kinds of azaleas, would seem hard to do. Diseases are common on hybrid azaleas, but these natural plantings are perfectly healthy and do not have the destructive bud blight found on the Atlantic seaboard.

The nurserymen of Oregon are especially anxious that no diseases or blights may ever be introduced into these plantings which might mar their natural beauty. Because of their unusual beauty and size and the lack of

disease, these azaleas may be of value in supplanting some of the imported varieties or in affording material for hybridizing, which might result in the development of strains resistant to disease and rot now found in other plants. With this thought in mind the nurserymen have been seeking ways to avoid contamination of these native stocks Following his investigation of the azalea park areas in Curry county, Mr. McWhorter made these recommendations as a means of protecting these plantings: Introduce no azaleas into the park areas. Plant no other ericaceous plants, especially rhododendrons, in these park areas. Immediately remove fir trees and rubus which are struggling with the azaleas for ground space, as slight leaf discolorations in a few large azalea plants seem to relate to inadequate water and food supplies.

NEW PATENTS.

The following new plant patents were issued the past month, according to Rummler, Rummler & Woodworth, Chicago patent lawyers:

No. 315. Daphne. Arthur Burkwood, Farnham, England, assignor by mesne assignments to the Wayside Gardens Co., Mentor, O. A daphne characterized by its vigorous, sturdy and bushy habit of growth in forming a neatly rounded subevergreen bush, its rooting system, its prolific foliage of a pale or grayish green color, its profuse flowering habit in the spring and its continual flowering habit throughout the growing season: its flower size and growth, and its long-tubed, fragrant flowers of pale pink color with deeper-colored buds borne in profusion in a terminal cluster and less densely on terminal branches issuing from a common neduncle.

No. 316. Cherry. Lewis Benjamin Reber, Royalton Township, Berrien County, Mich., assignor to the Greening Nursery Co., Monroe, Mich. A new variety of cherry, characterized particularly by the early ripening dates of its fruit as compared with the Montmorency cherry.

THE highway department of the state of Massachusetts has advertised for bids for nursery stock to be used on a United States roadside development project in the town of Concord. The bid calls for 144 trees, 270 vines and 10,466 shrubs. Plans and proposal forms may be obtained from the highway department office, 100 Nashua street, Boston, for which a charge of \$5 will be made. This amount will be refunded to all those who submit formal bids. Bids will be opened at noon March 21, at the office of the highway department.

Special Train to Portland

Scenic Points of Interest Will Be Seen by Those Taking All-Expense Trip on Special Train to A. A. N. Convention at Portland in July

Because the convention of the American Association of Nurserymen will be held in the northwest corner of the country next July, those who travel from the east and middle west will have double the usual opportunity for good fellowship and visiting with others in the trade by traveling to Portland, Ore., on the special train which has been arranged by the A. N. N. transportation committee, of which W. J. Smart is chairman. From Chicago or St. Paul, depending upon where you join the party, travel will be by the luxurious accommodations of the Burlington and Great Northern railroads. Detailed description of the trip is given in this issue, so that A. A. N. members or any other nurserymen who wish to make the trip can form their plans and make reservations now, before their attention is absorbed altogether by the rush of the spring planting season.

Because the travelers may wish to return by various routes, some stopping for shorter or longer periods at the San Francisco fair, the special train carries a rate that covers all expenses as far as Portland, whereas returning from that point home only the railroad transportation is included, leaving the individual to pay on his return travel for his Pullman fare, meals, etc.

The route of the special all-expense train to the Portland convention, which will leave Chicago, July 5, at 10 a. m., will include many scenic and historical points of interest. After leaving the Chicago station the train will pass through the suburban towns of Chicago until it reaches the Mississippi river at Savanna, Ill.

From Savanna the train will follow the Mississippi along a route that winds beneath the high bluffs and palisades of the river. Passing through Galena, which was once the headquarters for the river steamboat trade and the home of General U. S. Grant, Prairie du Chien, Wisconsin's second oldest city, is reached. From Prairie du Chien the route continues to La-Crosse and into Minnesota at Winona and goes on to Maiden rock and beautiful Lake Pepin.

Luncheon will be served in the dining car and the afternoon will be spent

CONDENSED SCHEDULE.

Lv. Chicago, via special train
10:00 a.m., July 5
Ar. St. Paul, Minn 6:00 p.m., July 5
Lv. Fort Worth, Tex 8:30 a.m., July 4
Ar. Kansas City, Mo10:10 p.m., July 4
Lv. Kansas City11:35 p.m., July 4
Ar. St. Paul, Minn 2:00 p.m., July 5
Lv. St. Paul, via special train
6:30 p.m., July 5
Ar. Glasgow, Mont 2:30 p.m., July 6
Motor tour to and around Fort Peck dam.
Lv. Glasgow 5:30 p.m., July 6
Ar. Glacier Park, Mont 6:00 a.m., July 7
Motor tour through Glacier park.
Lv. Belton, Mont. (Glacier Park)
2:00 p.m., July 7
Ar. Seattle, Wash 7:45 a.m., July 8
Lv. Seattle 9:00 a.m., July 8
Ar. Victoria, B. C12:50 p.m., July 8
Motor tour of city and gardens.
Lv. Victoria 4:30 p.m., July 8
Ar. Seattle, Wash 9:00 p.m., July 8
Lv. Seattle, Wash12:00 midnight, July 8
Ar. Portland, Ore 7:00 a.m., July 9

in viewing the scenery of Minnesota until St. Paul is reached at 6 p. m. At St. Paul the train will be joined by cars from Arkansas, Texas, Oklahoma and other central states. The train will leave St. Paul at 6:30 p.m., and Thursday morning will find it crossing the immense wheat fields of North Dakota. Shortly after luncheon the tour will reach Glasgow, Mont., where motor buses will be waiting to take the party on a trip to the Fort Peck dam, the largest earthfilled dam in the world. The motor trip to the dam site will skirt the higher points of the bluffs along the river and will unfold a panoramic view of the surrounding country as well as of the dam itself.

The return to Glasgow will be made



Along the Palisades of the Upper Mississippi River.

in time for a 5:30 departure of the train. From there the route will follow the Missouri river, from which the first glimpses of the Rocky mountains will be seen.

Breakfast, Friday morning, July 7, will find the train in the shadows of the towering mountains of Glacier National park. After breakfast on the train, the group will be entertained by an Indian powwow, staged by the Blackfeet Indians on the lawns of the Big Tree Lodge, which is the Glacier park hotel. This entertainment will feature tribal dances and songs. A fleet of motor buses will be waiting to take the party for a tour of the park through colorful mountains, along gleaming glaciers, lakes, streams and waterfalls over the mile-high Goingto-the-Sun highway, from which one can look down from a height of nearly a mile on the immense evergreen forests, flower-filled valleys and cool lakes. Luncheon will be served at the Lake McDonald hotel, which is situated on glacier-fed Lake McDonald. The trip will continue on through the park along the wooded shores of Lake Mc-Donald to Belton, western gateway to the park, where the train will be waiting. Leaving Belton, the train will continue on to the state of Washington along a scenic route which will include Flathead river, Whitefish lake, Canyon of the Kootenay and Lake Pend Oreille, to Spokane, Wash.

Saturday morning, July 8, will find

above sea level, and Benvenuto, the sunken gardens.

The sunken gardens are considered one of the most notable attractions of the Pacific northwest. These gardens are privately owned, but through the courtesy of Mr. and Mrs. R. P. Butchart, they are open to the public, and guides will escort the party through them. These famous gardens include Japanese and Italian gardens and English rose gardens with frog fountains and sundials.

the train entering the 8-mile Cascade tunnel. For 100 miles the train is drawn by giant electric locomotives through the Cascade range. Descending the slopes of the mountains to the rose-banked shores of Puget sound, the train will arrive at Seattle, Wash., at 7:45 a.m. Upon arrival at Seattle the passengers will transfer to a waiting Canadian Pacific steamer for a boat trip to Victoria, B. C. The steamer will cruise over the calm waters of Puget sound through the beautiful San Juan islands, reaching Victoria about noon. Luncheon will be served on the boat. Upon arrival at Victoria the party will transfer to buses for a sightseeing tour of Victoria and environs. The sights will include the Parliament buildings, Crystal gardens, the world-famous Empress hotel, business and residential sections, the famous Saanich fruit farms, the world's second largest observatory, located 720 feet home of R. P. Butchart's famous

The return trip will be by way of Elk lake, the bird sanctuary and government game farm and back to the city with its many other points of interest. The steamer will leave Victoria at 4:30 p.m. For those who desire to retire early the train will be parked for occupancy at 9:30 p.m., at the King street station, Seattle, but will not depart until midnight, so that those who so desire may partake of the Seattle night life. The train will arrive at Portland at 7 a. m. Sunday.

Train equipment for the trip will

RATES FOR PORTLAND TRIP.

CHICAGO TO PORTLAND.

All-expense cost from Chicago and St. Louis arrival in Portland. First-class standard Poman accommodations:

	VIER PRIL	AK TEROUT LWIT
	ticket	ticket
One in lower berth	\$137.45	\$47.15
Two in lower, each	127.85	37.55
One in upper	132.85	42.55
Two in dr. rm., each	152.85	
Three in dr. rm., each	141.65	51.35
Two in comp't., each	146.30	56.00
Three in comp't., each	137.30	47.00
Intermediate-class touris	Pullman	accommo-
	20111	997 OF
One in lower	\$111.90	\$37.95
Two in lower each	106 95	99 QE

One in lower, each. \$11.95 \$37.95
Two in lower, each. 106.95 \$2.26
One in upper. 109.55 \$35.55
The amounts shown in column headed "With rail ticket" permit of returning either via direct lines from Portland or via California.
The above amounts will also apply for passengers originating at \$8\$t. Louis, joining the tour at Chicago, except that Pullman or parlor car accommodations and meals are not included between \$8\$t. Louis and Chicago.

ST. PAUL TO PORTLAND.

All-expense cost from St. Paul to arrival in ortland. First-class standard Pullman accom-Portland. modations: ******

With	rall Without rail
tic	ket ticket
One in lower\$116	9.25 \$43.65
Two in lower, each 111	1.00 35.40
One in upper 115	39.70
Two in dr. rm., each 132	3.10 57.50
Three in dr. rm., each 123	
Two in comp't., each 127	
Three in comp't., each 119	
Intermediate-class tourist Pul	lman accommoda-
One in lower	3.00 \$36.05
Two in lower, each 93	
One in upper 95	.85 33.90
The above amounts headed "" permit returning via direct lin	
permit returning via direct mi	es onth-not via

FORT WORTH TO PORTLAND.

All-expense cost from Fort Worth and Dallas, Tex., to arrival in Portland. First-class standard

	With rail ticket	Without rail
One in leaves		\$49.95
One in lower	-6140.00	
Two in lower, each	. 136.65	38.55
One in upper	. 142.60	44.50
Two in dr. rm., each		68.55
Three in dr. rm., each		55.05
Two in comp't., each		60.15
Three in comp't each		49.45

The above amounts headed "With rail ticket" permit returning via California only—not via Denver or Kansas City. These figures include Pullman accommodations from Fort Worth to Portland, but not meals or other tour features between Fort Worth and St. Paul, the point where the tour is Joined.

KANSAS CITY TO PORTLAND.

All-expense cost from Kansas City, Mo., to arrival in Portland. First-class standard Pull-

man accommodations:		
	With rail	Without rail
		ticket
One in lower	.\$125.76	\$45.50
Two in lower, each	. 116.56	36.30
One in upper		41.10
Two in dr. rm., each	. 140.91	60.65
Three in dr. rm., each		49.80
Two in comp't., each		53.85
Three in comp't., each		45,25

ARE YOU GOING TO PORTLAND?

Editor, American I	Nurseryman,	
508 S. Dearbo	orn St., Chicago, Ill.	
I am going to Port	tlandprobably	
My party will in	ncludemen,women,children	1
I intend traveling	g by Train on the Convention Special	
By other t	trainAutomobileAirplane	
Please send me trai	in itineraryGlacier park folders	
Auto road maps	Golden Gate exposition foldersan	d
	(Mention any information desired)	*********
Name		*******
Firm		*********
Address		*********



On the official route of the Special Train to the Convention of the AMERICAN ASSOCIATION of NURSERYMEN





GOING-TO-THE-SUN HIGHWAY IN GLACIER NATIONAL PARK

PORTLAND, OREGON JULY 11 to 13

Via the Burlington Route and Great Northern Railway

Riding in modern, luxurious AIR-CONDI-TIONED Pullman cars—like a big happy house party, carefree of all transportation details.

Stopping over at Glacier National Park and motoring over 90 miles of an amazing highway through and over the top of the Rocky Mountains—thousands of enchanting pictures of colorful mountains, gleaming glaciers, turquoise lakes, crystal streams, lacy waterfalls, all these and more incomparable views of primeval forests and many meadows aglow with wild flowers. Truly the most spectacular drive in all America.

Descriptive literature pertaining to the Nurserymen's Special Tour will be gladly sent you on request without obligation.

	For	information,	mail	coupon	to
Mr. W	J. : Hill	Smart, Transp Nursery Co.	ortat Dur	ion Chai	rman

Name	****	*****	 *****	 	 *****	 	
Addre	250						

Also send your tour folder to:

Don't waste precious convention time touring the highways. Take the train for comfort, safety and economy.

include one rear end observation lounge car for the general use of the passengers and a sufficient number of standard and tourist Pullman sleeping cars, which will consist of sections, compartments and drawing rooms. Tourist sleeping cars consist of upper and lower berths, but contain no drawing rooms or compartments. These tourist cars are air-conditioned, but

All cars are air-conditioned, and there are no restrictions on the meals that will be served.

are less luxurious in general appoint-

ments than a standard sleeping car.

ALL-EXPENSE COSTS INCLUDE:

- Round trip rail ticket (for class shown) from point of origin as listed to Portland and return via routes specified in each case.
- Pullman accommodations to Portland only as specified under the various headings.
- 3. Motor tour to and around Fort Peck dam.
- 4. Motor tour through Glacier national park.
- 5. Luncheon at Lake McDonald hotel, Glacier National park.
- All meals on trains from point of joining all-expense features of tour to Portland.
- 7. All meals on steamer.
- 8. Steamer side trip Seattle to Victoria, B. C., and return.
- 9. Motor sightseeing tour to Butchart's gardens, Victoria, B. C.
- 10. Tips to waiters and Pullman porters from Chicago to Portland.

THE Powell Floral Co., Wichita Falls, Tex., has opened a nursery at 1600 Collins street.

BASIC plans for a 2,000-mile scenic highway along the west shore of the Mississippi river from Lake Itasca in Minnesota to New Orleans have been announced. The parkway will be principally a pleasure drive and a right of way of several hundred feet will be landscaped with trees, bushes and flowers native to the river area.

FEDERAL operations against the gipsy moth, which has increased greatly as a result of favorable weather, were confined the past year to the barrier zone between New England and New York, to the points of heaviest infestation directly east of that zone and to scattered areas of infestation in New York and Pennsylvania. Operations against the browntail moth, conducted for the two preceding years, were halted.

SPECIAL SPACE.

To insure desirable Pullman accommodations it is suggested that early reservations be made for space in order that the railroad may contract for suitable and sufficient Pullman sleepers to accommodate. This is particularly true for those parties desiring drawing rooms or compartments, also tourist Pullman accommodations. Please let me have your reservations for such space as soon as possible.

William J. Smart, Chairman, Transportation Committee.

Sales Promotion

Means of Cultivating Interest in Quality Nursery Stock Offered by J. G. Bacher, New President of Pacific Coast Association

Of all tasks facing a nurserymen's organization today, none appears to me to exceed in importance that of sales promotion work. Little effort has been expended in this line of late, and no plans have appeared to carry on propaganda for the sale of nursery products.

The markets for nursery stock in our population centers are being drained by the effective sales promotion work of competing industries, which capture the dollars that might be used for our products. The home-owning public is well informed on all the modern developments and newer gadgets of industry that make life more appealing and our surroundings more upto-date and modern.

However, it may well be recognized that most homeowners have little information and understanding of nursery products and gardening in general and, therefore, they are reluctant to purchase items they are but faintly aware of as having any merit. They usually limit the purchase of such things to the cheapest grade offered. We all know that good nursery stock has merits for home beautifying that are most desirable and seldom shared by any other merchandise. Take, for an illustration, a choice conifer suited to the climate and the location; a few dollars invested in the planting of such a tree will double and treble in value in a few years and become the source of admiration for untold numbers of people who may happen to see it. Compared with other articles of commerce, which in a short time become obsolete and lose their value, the dollar spent on the tree is a real investment to be proud of perhaps for generations to come.

Many of the nurserymen's products carry just such growing value, and homeowners may feel well justified in acquiring them in preference to other items they know in advance will soon lose their appeal.

Here is where educational propaganda must be applied by the nurserymen in order to inform the purchasing public of the merits of quality nursery stock. Naturally that is a large task, and for a nursery organization to reach the public effec-

tively might be too costly, but there are ways and means of permitting such work to be carried on with fair promise of good results. The logical method is to use the channels of the garden club movement, which is of nation-wide scope and directed by the element that is our best potential market for nursery stock, the garden club ladies. Their energies are bent on acquiring a better understanding of garden material and planting problems, flower arrangements and use of trees and shrubs.

Here is where the helpful hand of the nurseryman is most welcome. The club members enjoy having programs at which experts come to give them information on the materials that make handsome gardens. Nurserymen the country over should be willing to further the garden club movement, for here is the fountain of new recruits for plant lore. It is those who have learned to know quality nursery stock that will gladly pay more to purchase a better plant, in which they can take pride. Those who do not know the difference between the everyday things and quality plant material are usually satisfied with the cheapest offerings, that leave a nurseryman hardly more than a bare existence.

Nursery associations everywhere should strive to encourage the garden clubs, offer them assistance in program lectures, encourage their exhibits and flower shows by all means possible, for so we shall make new contacts with the public interested in gardening and swell the ranks of prospective customers for nursery products.

This sort of publicity work will accomplish much for the good of our trade. I venture to say it will give better returns than any other contact we could make with the garden-conscious public. The beauty of it is that such effort will create much good will and really need cost little. Each region where nurserymen are active should appoint a diligent committee to study the opportunities of serving garden clubs of the vicinity.

Naturally there would be great wisdom in creating series of natural color pictures showing the best use of quality nursery stock for home decoration suited to the region of the clubs. The colorful beauty of plant life makes such appealing pictures that the desire to plant is greatly stimulated in any audience where such pictures are shown. The presence of an expert nurseryman as speaker on a program is a drawing card for the membership of a club, and the good that can be accomplished for our industry is unlimited.

The service of this nature to garden clubs should be continuous and nation-wide, and it would only take a short time to locate sufficient talent among nurserymen to begin operation of such a scheme. So far as possible, such services ought to be furnished free of charge to well established garden clubs, or at least for minimum fees where the cost cannot be assumed by a local nursery group. Some of the garden clubs are able and willing to pay for program speakers.

Frankly, I believe our nursery organizations are due to study and carry on such nursery propaganda as one of the most beneficial endeavors in creating a larger demand for the products of our entire industry.

I hope that the presentation of this

We enjoy a nice business from Nurserymen all over the United States and Canada and we solicit your continued patronage.

We offer a very COMPLETE ASSORTMENT of GENERAL

NURSERY STOCK of the HIGHEST QUALITY

Write for Spring Price List with grade counts. Send us your WANT LIST for quotations.

LAKE'S SHENANDOAH NURSERIES

Shenandoah, Iowa

idea for more extensive nursery sales propaganda will be carefully studied by national, state and local nursery organizations and result in fruitful action for the benefit of all.

MASSACHUSETTS PLANS.

Results are already apparent from the appointment of a coöperative committee by Lloyd A. Hathaway, president of the Massachusetts Nurserymen's Association, to work with the Waltham field station, as reported in the February 15 issue.

At a meeting at the Waltham field station, March 4, the committee and station representatives decided definitely to undertake experiments to determine whether it is possible to increase the hardiness of certain evergreens through fertilizing treat-

It was also decided to establish at the Waltham field station, in conjunction with the perennial display beds, a collection of not over fifty of the better deciduous flowering trees and shrubs.

This month appeared the first issue of the Massachusetts Nurseryman, a mimeographed publication of the state association published at the Waltham field station. Prof. Harold S. Tiffany is the editor. This follows the lines of similar cooperative efforts in New Jersey, New York and Ohio to keep nurserymen posted on local developments and interest them in their state organization. This first issue of the Massachusetts publication gives a review of material which has appeared in station bulletins on insect control.

NEW LEGISLATION.

An attempt to repeal legislation enacted two years ago prescribing the labeling and grading of nursery stock has caused much interest among nurserymen in California. A new bill. No. 966, in the senate of the California state legislature was introduced by Senator Phillips; its purpose is to amend the several sections of the existing law. Senator Crittenden introduced senate bill No. 553, eliminating the grading of nursery stock and seeking the repeal of much of the grades and standards law.

Mr. Burson introduced assembly bill No. 21, amending the agricultural code relating to plant quarantine and pest control.

Special Prices for This Month

Better cover your wants at once at these low prices.

See our 2-page advertisement in December 15 issue and 1-page advertisement in January 1 issue for special prices on a good assortment of lining-out stock. Also February 1 issue for prices on understocks for grafting or budding.

Send want list for special quotations on large quantities.

Write for copy of our Spring Wholesale Trade List.

BERBERIS THUNBERGII.			LIGUSTRUM OBTUSIFOLIU	M.	
Japanese Barberry. Per	Per	Per	Ibota Privet. Pe	r Per	Per
10	100	1000	10	100	1000
6 to 9 inches, S \$0.10	\$0,60	\$5.00	6 to 12 inches, S\$0.1		\$5.00
9 to 12 inches, S30	1.25	9.00	12 to 18 inches, S		8.00
12 to 15 inches, S30	2.00	15.00	18 to 24 inches, S		10.00
15 to 18 inches, S40	3.00	25.00	2 to 3 feet, S		12.00
12 to 15 inches, Tr70	6.00		6 to 12 inches, 2 branches		
15 to 18 inches, Tr 1.00	8.00		up	0 1.25	9.00
18 to 24 inches, Tr 1.25	10.00		12 to 18 inches, 2 branches2		12.00
Less 10 per cent discount on	condlin	nee in	12 to 18 inches, 3 branches		24100
lots of 10,000.	secuiii	nga m	up	0 2.00	15.00
1018 01 10,000.			18 to 24 inches, 3 branches		20100
LIGUSTRUM AMURENSE.			up	5 2.50	20.00
			2 to 3 feet, 4 branches up .4		30.00
Amoor North Privet.			- to o total a premium up 14		90.00
6 to 15 inches, L.O	\$0.60	\$5.00	LIGUSTRUM OVALIFOLIUS	I.	
6 to 12 inches, 2 branches			California l'rivet.		
up\$0.10	.80	6.00	6 to 15 inches, L.O	. 80.45	\$3.50
12 to 18 inches, 2 branches15	1,00	9.00	6 to 12 inches, 2 branches		******
12 to 18 inches, 3 branches			up	60	4.50
up	1.50	12.00	12 to 18 inches, 2 branches. \$0.1	08. 0	6.00
18 to 24 inches, 2 branches20	1.50	12.00	12 to 18 inches, 3 branches	-	
8 to 24 inches, 3 branches			up	5 1.00	8.00
up	2,25	17.50	18 to 24 inches, 2 branches1		8.00
2 to 3 feet, 4 branches up .35	3,00	25.00	18 to 24 inches, 3 branches		-
3 to 4 feet, 4 branches up .45	4.00	35.00	up	0 1.25	10.00
4 to 5 feet, 5 branches60	5.00	45.00	2 to 3 feet, 4 branches up .3		18.00
Less 10 per cent discount in 1	0.000 0	P CAF-	Less 10 per cent discount in		
oad lots.	.,		load lots.	20,000 0	r car.

FOREST NURSERY CO., INC.

Established 1887 By J. H. H. Boyd

McMinnville, Tennessee

J. R. Boyd President

SPECIMEN LANDSCAPE MATERIAL

Large Sizes

Many Varieties

Shade trees, up to 10-in. trunk diameter. Evergreens, up to 20 ft. high. Flowering trees. up to 16 ft. high. Flowering shrubs, up to 12 ft. high. Brond-leaved Evergreens.

Highest Quality Stock-Carefully Main-

Send in your list for estimate.

LEWIS NURSERIES, Inc.

Roslyn, L. I., N. Y.

OUALITY NURSERIES

Allenwood, Pa.

ALL KINDS hi-grade **EVERGREENS**

Let us quote on your needs

Very Special Prices on ADIES CONCOLOR

		6	L	The same	COM	JULIU	, 15	
1	to	2	ft.			\$40.00	per	100
2	to	3	ft.		**********	70.00	per	100
3	to	4	ft.			95.00	ner	100

Messrs. Gilmore and Green introduced assembly bill No. 1535, repealing various sections of the agricultural code covering the grades and standards

Mr. King introduced assembly bill No. 1202, amending the agricultural code relating to nurserymen's licenses.

TAXUS AZALEAS RHODODENDRONS

ASK US ABOUT THEM

FRAMINGHAM NURSERIES

MASSACHUSETTS

LINING-OUT STOCK

Complete list of deciduous lining-out stock this year.

Place your order now for Spring shipment, and avoid disappointment when wanted.

THOMAS B. MEEHAN CO. Dresher, Pa.

Mr. Burson introduced assembly bill No. 2139, amending the agricultural code relating to agricultural seed definitions and providing for the elimination of goat grass, Ægilops triuncialis, and coast dandelion, cat's-ear, or Hypochæris radicata, from the list of "primary noxious weeds."

Interstate Trade Barriers

Report of Federal Bureau Recommends Removal of Restrictions on Internal Trade in Farm Products

Action looking toward the removal suggests that interstate trade wars may of interstate trade barriers which are causing "incalculable economic loss" to the nation was recommended March 7 by the bureau of agricultural economics in a special report to the Secretary of Agriculture. The report, "Barriers to Internal Trade in Farm Products," is sponsored by state commissioners of agriculture through the marketing committee of the National Association of Commissioners, Secretaries and Directors of Agriculture.

Practically every state, it is shown in the report, has placed regulations and restrictions upon interstate trade in foods and other commodities. Every farm product is affected. The regulations and restrictions include discriminatory inspection fees, licenses and taxes; conflicting food grading, labeling and packaging laws, and a bewildering maze of quarantines, embar-

goes and other impositions.

In a foreword, Secretary of Agriculture Henry A. Wallace says, "It was thought that the Constitution ensured free trade between the states. Today we cannot say that we have free trade between the states. The heaviest burden for remedial action obviously falls upon the states, but there may well be a number of things the federal government can do. Together. I hope we can map a continuous, vigorous, intelligent program of action to the end that state lines may again become broad highways of commerce serving the general welfare."

The bureau report details the way in which states and municipalities may employ milk and cream inspection laws, ordinances and regulations as trade barriers. It shows how state margarine laws in many cases have defeated their own purpose, and resulted in retaliatory measures by other states. It gives instances in which motor vehicle laws and restrictions of merchant truckers have hampered trade.

Conflicting grading, labeling and packaging laws are cited as examples in the field of interstate trade barriers, and quarantine laws causing delays in the interstate movement of products receive attention. Liquor laws which discriminate against out-of-state products are condemned, and the bureau

result from state-financed advertising campaigns for farm products.

Federal and state coöperation is urged in attacking the whole problem of interstate trade barriers. Although the report makes no formal recommendations for legislation, it discusses principles that might be followed by legislative bodies in acting to remove barriers to trade in farm products.

A section of the bureau's investigation dealt with federal and state quarantines designed to prevent the introduction of insect pests and diseases. The conclusions drawn are that "although the state and federal plant and animal quarantines, regarded as a whole, are beneficial and indispensable, they have faults that could be remedied. Uniformity of state regulations is the exception rather than the rule.

"Some quarantines can be criticized for requiring unnecessary red tape, delay or expense; for including free areas within the limits of the area quarantined against; for lacking a sound biological basis, or for violating one or another of the principles that have been suggested as desirable.

"At the same time, the excellent work that has been done toward remedving the existing faults must not be forgotten. The persistent efforts of the national and regional plant boards, and the competent, impartial study of the California committee stand in the forefront of the accomplishments in this field to date."

MEET ON TRADE BARRIERS.

In an effort to halt the erection of tariff barriers among the several states a national conference on inter-

state trade barriers has been called by the Council of State Governments, to be held at Chicago, April 5 to 7.

The council is composed of state governors, commissioners and legislators, who resolved in a general assembly at Washington, D. C., in January that interstate trade barriers. under whatever guise, are detrimental to the economic welfare of the country. Forty-six of the forty-eight states were represented at the assem-

Frank Bane, executive director of the council states that committees dealing with various phases of the barriers problem have been established by the council. Dr. F. V. Waugh, in immediate charge of the investigations of the bureau of agricultural economics on trade barriers, has been invited to serve as a member of the committee on agriculture.

Mr. Bane reports that scores of additional bills extending these trade barriers are pending in many of the forty-two state legislatures now in session. Mr. Bane adds that all agree that this movement, if not halted, will undermine one of the basic principles set forth in the Constitution, a principle upon which our prosperity and well being largely depends.

The governors' conference, held at Oklahoma City, Okla., last September, concerned about this situation, authorized its chairman to announce that the group unanimously opposed the principle of state trade barriers and was of the opinion that such barriers between the states should be

At the general assembly at Washington complete adherence to the traditional American policy of free trade among the states was recommended. The assembly further resolved that the secretary of the Council of State Governments should study legislation and policies which tend to create such barriers and to

FRUIT TREE

APPLE — MAHALEB — MAZZARD QUINCE — MYROBALAN PEAR - BARTLETT, FRENCH, SEROTINA, USSURIENSIS

A large acreage of high-quality Fruit Tree Seedlings. Growing plants in Washington and Kansas. Get our prices before buying.

Ask For 92-Page Trade List Large and Complete Line General Nursery Stock

MOUNT ARBOR NURSERIES

Est. 1875 E. S. Welch, Pres. Shenandoah, Iowa "One of America's Foremost Nurseries"

restrict the free flow of commerce and call at the earliest practical time an interstate conference on this subject. The Chicago meeting is in accordance with this resolution.

SUPREME COURT DECREE.

Widespread attention is being given the first decision of the Supreme Court of the United States written by its junior member, Justice Felix Frankfurter. This upheld the decree of a District court enjoining enforcement of a Florida statute providing for an inspection fee on all imported cement of 15 cents per hundredweight. Under the Florida law no inspection was required of domestic cement, constituting seventy per cent of that sold in Florida. Because of "the calculated discrimination against foreign commerce," the Florida statute was declared unconstitutional.

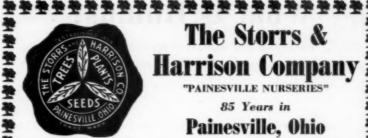
Whether a parallel case might be found in discriminatory taxes levied by a state against the products of another state is a subject of discussion. The outcome may be of considerable importance.

DISCUSS ILLINOIS LAWS.

Trying out the plan proposed at the annual convention in January, the Illinois State Nurserymen's Association held the first quarterly meeting March 9, at the Hotel La Salle, Chicago. After a meeting of the board of directors in the afternoon, twenty-eight members gathered at 7:30 to discuss current legislative matters, concluding with a social hour and buffet luncheon.

Secretary Miles W. Bryant discussed the progress of the current federal legislation affecting nurserymen and dwelt at more length on state matters. Neither the horticultural license bill nor a state wages and hours bill has yet been introduced. The proposed Illinois truck act he described as a regulatory, not tax, measure, not well understood either by himself or persons with whom he had discussed it.

Upon codification of the state tax laws, many amendments will be offered in the state legislature, and this may be the logical time to eliminate the reference in a 57-year-old law to the taxation of growing nursery stock as personal property. Several members reported having been hard hit by such assessments, and as it is appar-



The Storrs & **Harrison Company**

85 Years in

Painesville, Ohio

FOR COMPLETE NURSERY SUPPLY MIDWEST HEADQUARTERS

Fruit Trees Deciduous Trees Evergreen Trees Shrubs

Small Fruits Roses Hardy Perennials Plants Seeds, Bulbs, Tubers

FINEST LANDSCAPE STOCK

Ready for this winter's planting, covering all of the best shrubs and plants for the south. Also a half million of lining-out CAMELLIAS, AZALEAS and GENERAL NURSERY STOCK now ready.

Write for Price List

E. A. MeILHENNY

Specialist in CAMELLIAS, AZALEAS, IRIS and HEMEROCALLIS AVERY ISLAND, LA.

The Best in Native Nursery-grown

Rhododendrons Kalmia. Hemlocks **Azaleas and Pieris**

Write for Spring Prices

LaBars' Rhododendron Nursery STROUDSBURG, PA

TAXUS

Cuspidata Capitata

11/2 to 10 feet.

Best available.

Carloads or truckloads only.

VISSER'S NURSERIES Springfield Gardens, L. I., N. Y.

BROADLEAF EVERGREENS

ERUAW																						W 20 F 9
3	0 to	3	6 i	ni	Ø																	\$24.0
3	6 20	4	2 1	n	R.										ì	Ī						30.0
Holly																						
5	to	6	ft.									٠.										45.0
6	to	7	ft.																			65.0
7	to	8	ft.													,						80.0
Male			B 2	5	p	161	ľ	e	eı	nt		1	91	32	t,							
Elæas																						
3	to	4	ft.				*				'n	×			×	*				×	*	10.0
4	to	5	ft.	18			×							*	*			×	×			15.0
Maho	nia	A	Lgu	il	fo	ti	u	m														
2	to	3	ft.														*		×	×		7.0
3	to	4	ft.								*		×	×		×		×		*	*	15.0
Write	for		uo	ti	at	io	(1)	18														

WAYNESBORO NURSERIES, Inc.

ently only a matter of time before the practice of such assessments becomes general, it was deemed wise to take steps to remove this tax by amending the statute.

PINK DOGWOOD Per 100
4 to 5 ft., B.R\$220.00
5 to 6 ft., B.R 265.00
TAXUS OVATA, rare upright yew;
all field plants.
4 to 6 ins., heavy 20.00
6 to 8 ins., heavy
8 to 10 ins., heavy 45.00
10 to 12 ins., heavy 65.00
12 to 15 ins., heavy 85.00
15 to 18 ins., heavy 100.00
ABELIA EDWARD GOUCHER.
rare new pink.
2-in. pots
AZALEAS, CORAL BELLS, SNOW
2-in. pots 10.00
List ready.
VINCEUILLE MIDCEDIRE L
KINGSVILLE NURSERIES, Inc.

The problem of raising funds for that purpose brought discussion of increasing the dues and adding more members, until the adjournment at 10 p.m. for refreshments.

Kingsville, Md.

What Is Humus?

Nature, Formation and Sources of Humus, Described at New Jersey Short Course - By S. A. Waksman, Rutgers University

Humus is the term commonly applied to designate the dark-colored mass of organic matter which originates in nature from the decomposition of plant materials such as straw, green manures, leaves, pine needles and other tree residues, various bog plants and stable manures. Leaf mold, peat, composts and the organic matter of the soil are forms of humus. The nature of the humus thus produced varies considerably, depending on the nature of the plant materials, microörganisms active in the decomposition processes and conditions of decomposition, such as moisture, temperature, aëration, reaction and presence of inorganic

Humus is not a simple chemical compound, nor is it a well defined compound or group of compounds. Its physical properties are that it is dark in color, has a high moistureholding capacity, can expand on absorbing moisture and has high buffering properties which prevent rapid injurious changes in the soil. It is for the latter reason that nutritional or fertilizer troubles are always less frequently encountered in soils high in humus than in sandy soils or soils low in organic matter. High humus content in the soil increases the heat-absorbing properties. Thus, such soils warm up quicker in the spring and do not get so cold in the

The chemical properties of humus are also of great importance. Humus usually contains about fifty-eight per cent carbon, forty-five per cent nitrogen, one-half to two per cent P2O3, some potash, calcium, magnesium, sulphur and other elements. Some of the carbon is decomposed to carbon dioxide, which is used by the plant to manufacture food.

As a rule, the atmosphere does not contain sufficient carbon dioxide for optimum plant growth, and the carbon dioxide formed by the decomposition of the carbon in humus is an important source of supply for this extremely essential material. The nitrogen in humus changes to ammonia, which in turn changes to

nitrate, a form which is available to plants. Because humus decomposes slowly, it provides a steady, slow source of nitrogen, potash and phosphates to plants. Humus is a natural fertilizer

The biological phases of the humus problem are also of great importance. Humus undergoes a gradual change, due to the presence of microbes. The microbes constantly compete with one another and, in doing so, usually provide favorable media for the higher plants.

Suppose we analyze the constituents in ten tons of straw. We shall find about two per cent fats, forty per cent cellulose, three per cent protein, twenty per cent carbohydrates other than cellulose, fifteen per cent lignins, eight per cent moisture and about five per cent ash. The microbes attack the cellulose and other carbohydrates first. If we examine this same pile of straw three months later, we shall find that some striking changes have occurred. First of all, we shall find that only about five tons of material are left, that the ash content has increased to ten or fifteen per cent, that proteins have

The Best Shrub Novelty In Years! Due for An Enormous Run of Popularity VIBURNUM BURKWOODI

This new English hybrid "has every ! If you doubt that one shrub can have so many good points, consider carefully:

sider carefully:

1. It is semi-evergreen, but still hardy and vigorous, growing to about six or eight feet.

2. Flower heads up to four inches wide and 250 individual flowers. These come on long stems; so are excellent to cut.

3. It is as richly fragrant as V. Carlesti (one of its parents), but blooms two or three weeks earlier.

4. Autumnal color on part of its foliage is intensely brilliant—unexcelled in fact.

fact.
5. Suitable for all but coldest parts of the country, being hardy up to Lake Erie. Grafted stock ready for immediate shipment: From 5-in. pots 1 to 11/2 ft., 10 or more, at 75c; 50 or more, at

70c; 100 or more, at 65c.

Packing at cost unless full remittance accompanies order, in which case free packing.

Better get in early while the getting good! That's the way to make

is good! Inat's the way to make money on new things.

We can ship mately by freight now to any point in U.S. A., so don't delay! Or we can remove most of the soil and ship by express. We know how to pack in either case. Don't worry about our ability to ship safely to Atlantic coast points.

We are doing it constantly.

W. B. CLARKE & CO. San Jese, California

increased to from ten to twenty-five per cent and that cellulose and other carbohydrates have been reduced to five or eight per cent. The lignin in humus decomposes slightly, and it will even increase up to forty per cent. The proteins in humus do not decompose, but are compounded with the lignin, thus will not decompose readily and are in a form which will be slowly available later. The humus we have is a totally different compound than the plants from which it was derived.

The most common sources of humus are: (1) Plant residues (stubble, roots, leaves, needles); (2) manures and composts; (3) peats (which vary in composition depending on the

LAST CALL ON

Autumn, burnt-orange. Condesa de Sastago, fiame. Duquesa de Penaranda, copperapricot.
Editor McFarland, red.
Sœur Therese, yellow.

Aml Quinard, dark red. Betty Uprichard, two-tone pink. Betty Uprichard, two-tone pink. Cuba, single red.
Clottide Soupert, light pink. Dainty Bess, single pink.
Dame Edith Helen, pink.
Edith Nellie Perkins, pink.
Edith Nellie Perkins, pink.
Etoile de Hollande, red.
Golden Dawn, yellow.
Kaiserin Aug. Victoria, white.
Lady Hillingdon, yellow.
Mrs. Chas. Bell, shell-pink.
Mrs. Herbert Stevens, white.
President Hoover, multicolored.
HYBRID PERPETIALS.

HYBRID PERPETUALS. American Beauty, dark rose-red. Frau Karl Druschki, white. General Jacquemindt, dark pink. Henry Nevard, everblooming red. Magna Charta, pink. Ulrich Brunner, red.

Austrian Copper, copper POLYANTHAS.

Else Poulsen, pink.
Gruss an Aachen, pink.
Kirsten Poulsen, red.
Triomphe Orleanais, dark pink. HYBRID RUGOSAS.

HYBRID RUGUSAG.
Belle Poltevine, pink.
Conrad F. Meyer, pink.
Dr. Eckener, Talisman-like.
F. J. Grootendorst, red.
All Contendorst, pink.
Hash, Grootendorst, pink.
Hash, Grootendorst, pink.
Hash, Grootendorst, pink.
Hash, Grootendorst, pink.
Sarah Van Fleet, pink everblooming.
Sir Thomas Lipton, white.

CLIMBERS.
American Pillar, single pink.
Cl. Gruss an Teplitz, red.
Crimson Rambler, crimson.
Dorothy Perkins, pink.
Excelsa, red Dorothy.
Scorcher, red.
Silver Moon, white.
White Dorothy Perkins, white.

AMOOR RIVER PRIVET.

100 1000 10,000
Liners\$1.00 \$8.00 \$75.00
12 to 18 ins. 2 br. up. 1.50 12.00 100.00
18 to 24 ins. 2 br. up. 2.00 17.00 150.00
2 to 3 ft. 3 br. up. 2.50 20.00

EVERGREENS.

Prices f.o.b. nursery.

VERHALEN NURSERY CO. Scottsville, Tex.

GRAFTED STOCK

for delivery spring 1939 shipped from 24-in. pots.

JUNIPERUS Per 10	Per 100
Columnaria glauca\$2.75	\$25.00
Columnaris viridis 2.75	25.00
Chimensis memberiensis 2.78	25,00
Chinensis Sargentii 2.75	25.90
Chinensis Sargentii glauta 2.75	25.00
Sauamsta 2.75	25.00
Squamata argentea variegata 2.75	25.00
Squamata Meyeri 2.75	25.00
Japonica surea variogata 2.75	25.00
Virginiana Burkii 2.75	25.00
Virginiana Canartii 2.75	25.00
Virginiana elegantissima 2.75	25.00
Virginiana glauca 2.75	25.00
Virginiana globosa 2,75	25.00
Virginiana Keteleeri 2.78	25.00
Virginiana Kosteri 2.78	25.00
Virginiana Schettii 2.78	25.00
Virginiana sandula	25,00
Virginiana pyramidiformis 2.75	25.00

HESS' NURSERIES Mountain View, New Jersey

BOBBINK & ATKINS

Nurserymen since 1898 Rutherford, New Jersey

Send for a copy of our 1939 Wholesale Catalogue.

Use printed stationery, please.

NANDINA DOMESTICA

Cash with order.

DUNLAP NURSERIES Knoxville, Teni

For New England and White Mountain Evergreens, Trees, Shrubs, Bulbs, Ferns and Wild Flowers Write for Catalog

L. E. WILLIAMS NURSERY CO. Exeter, N. H.

PRINCETON NURSERIES

of PRINCETON, N. J. SUPERIOR **Hardy Ornamentals**

PRIVET and BERBERIS

Splendid Stock Write for Special Quotation

LESTER C. LOVETT DELAWARE

Koster Company, Inc.

Japanese Maple Seedlings 4 to 8 ins., 1-yr. untpl...\$10.00 per 1000 Juniperus Virginiana Seedlings 3 to 6 ins., 1-yr. untpl... 10.00 per 1000 BRIDGETON, N. J. Weite for catalogue

type of material from which they are derived, conditions under which they are formed and other factors); (4) green manures; (5) animal residues; (6) industrial by-products such as cottonseed meal and tankage.

Humus is the most important soil constituent and is our most valuable natural resource, even more valuable than minerals or water power.

NEW JERSEY NOTES.

New Jersey nurserymen should realize new business to the extent of at least \$250,000 annually by the use of the recently approved methyl bromide for fumigating nursery stock to be shipped outside the Japanese beetle quarantine area, according to Dr. C. C. Hamilton, state entomologist. Besides, there should be an actual saving of about \$75,000 in the treatment of plants. He bases this statement on a saving of from 3/4 cents to 21/2 cents a plant on treating deciduous trees and shrubs shipped without soil, a decided saving in treatment of balled stock and the fact that treating of nursery soil with arsenate of lead will be no longer necessary, and that costs about \$200 per acre.

Gerard Grootendorst, Oakland, N. J., represents nurserymen on the newly formed Bergen county agricultural council.

Dr. P. P. Pirone was presented with a handsome traveling bag by the nurserymen for his efforts in connection with the recent short course.

Otto Bergmann, Paramus, N. J., has returned with his bride from their honeymoon in Florida.

Roy Blair, of Blair's Nursery, Nutley, N. J., took his bride on a honeymoon trip to Florida after their marriage, February 17.

Your Garden This Week" is the title of a book by Ben Blackburn, extension specialist in landscape gardening at the New Jersey college of agriculture, which was published February 15 by the Rutgers University press and is being sold through New Jersey newspapers at 50 cents per copy and outside the state for \$1.

Charles Hess, president of the New Jersey Association of Nurserymen, early this month reported contributions of \$550 from twenty New Jersey nurserymen toward the \$1,300 necessary to match the funds provided by the New Jersey council for a series of advertisements of nursery stock to be run in newspapers this spring.

FRESH SEED

Immediate Shipment from New York

Acer palmatum Per 1/4 lb. Per lb.

atropurpureum \$3	00 .	10 00
Abies arizonica	\$2.00	\$7.25
Ampelopsis quinquefolia	.45	1.35
Azalea schlippenbachi,		
1/4 oz., 95c Berberis thunbergi, c.s	.75	2.50
Berberis thunbergi		
atropurpurea,		
1000 seeds, \$2.00	******	******
Berberis verruculosa,		
1/2 oz., \$1.50		******
Cedrus deodara		2.75
Chamaecyparis pisifera	.75	2.50
Cotoneaster dielsiana		
major, c.s	2.00	******
Cupressus arizonica	.90	3.25
Cupressus macrocarpa		3.25
Fraxinus lanceolata	.25	.75
Ginkgo biloba		.60
Gleditsia triacanthos	.25	.75
Gleditsia triacanthos		
inermis	.40	1.25
Hamamelis vernalis		4.40
Juniperus scopulorum	.50	1.55
Juniperus virginiana		
(Northern)		1.50
Liriodendron tulipifera		.75
Picea canadensis		1.75
Picea excelsa		1.25
Pinus nigra		1.75
Pinus resinosa		7.00
Pinus rigida	1.10	3.75
Pinus strobus	.55	1.75
Pinus sylvestris		1.25
Pinus virginiana	1.65	6.00
Rhododendron cataw-		
biense, c.s., oz., 80c		******
Sassafras variifolium		1.10
Shepherdia canadensis		2.75
Swietenia mahogani		9.00
Symphoricarpos vulgaris		1.30
Thuja occidentalis	1.00	3.50

HERBST BROTHERS

92 Warren St. New York, N. Y.

"A friendly, efficient sales service"

E. D. ROBINSON SALES AGENT 58 So. Elm St. P. O. Box 285 WALLINGFORD, CONN.

presenting
Adams Nursery, Inc.
Bristol Nurseries, Inc.
Barnes Brothers Nursery Co., Inc.
North-Eastern Forestry Co., Inc.
A. N. Plerson, Inc. Representin

A complete line of well grown, hardy plant material

BURR'S QUALITY SEEDLINGS

Barberry Thunbergli, Barberry Red Leaf, Ibota Privet, Ampelopsis Veltchii, Dutchman's-pipe.

At Bargain Prices C. R. BURR & COMPANY, INC.

Use of Plants from Nursery

Success of Products in Customers' Hands Important to Nurseryman, Told New Jersey Short Course-By Ben Blackburn, Rutgers University

After hardy plants leave the nursery, most of them will be used in landscape plantings. Sometimes there are intermediate stages before this use is realized, and there may be a number of cases in which nurserygrown plants are not destined for actual landscape plantings, but these factors are of less general interest. How his plants are used and how they are treated after they leave his immediate care are pertinent to the business of every nurseryman.

Plants inexpertly used and poorly cared for arouse annoyance and disapproval of every keen, observant person who sees them; they reflect small credit to the nurseryman who sold them, even though he may not be responsible for the way they have been handled. As an example, overgrown junipers bordering a front walk-invariably growing open and bare-legged at the base as crowding and red spider attacks progress season after season-certainly speak no good for the landscape gardener (if the advice of one was sought) or for the homeowner, and there can be no complete pardon for the nurseryman either. A mass planting of assorted conifers against the front of a house draws the same judgment, though this may be tempered with a puzzled amusement at the tolerance of homeowners who see an evergreen forest springing up on either side of their doorstep. How such inappropriate and self-defeating plantings can be tolerated week after week and year after year seems to defy explanation. There are countless examples in residential areas everywhere.

The other picture, however, presents a welcome contrast. Plant materials built into an orderly, appropriate planting make an interesting and inspiring picture which gains credit for all who have contributed to it. A restrained, artistic front yard treatment, with shade trees, lawn, ornamental shrubs, plantings of shrubs and vines around a building. or a thoughtfully developed and well maintained back-yard garden brings this feeling of approval for all who have had a hand in producing this art in living plants.

Certainly, nurserymen cannot continue to act as godfathers to all of their plants after they leave the nursery, but in retail nurseries this continued supervision is a valuable means of follow-up for sales. Nurseries doing landscape work can often continue supervision, sometimes over a long period of years, and this makes a fine relationship between nurserymen and home gardeners-a relationship which should be profitable for

First of all, the average purchaser of retail nursery stock rarely has any idea of the size to which woody plants will grow and the shape they will assume. Some home gardeners have pictures of mature specimens they have admired in old gardens, in parks or in the wild, and such observations, coupled with sound knowledge about soil and other growth requirements, should result in good plantings. The average homeowner thinks of plant materials only as he knows them in new or fairly new plantings-quite possible in the massed collection type of planting-or as he sees compact, juvenile specimens at a nursery. More nursery lists should contain figures indicating the size ornamental plants may be expected to reach in gardens, and salesmen at nurseries can be pre-

pared to give this information. In this connection, many expert plantsmen are so used to handling and seeing young stock that they often think of their plants growing only to an "ideal" size for landscape work and fail to consider that in favorable conditions they may grow much

If the purchaser knows how large his plants will probably grow and uses them accordingly, better plantings, more satisfactory gardens and much better enduring relationships between nurserymen and clients will result. Permanent metal labels properly attached to retail orders as the plants leave the nursery might be embossed with the ultimate size the plants may be expected to reach in that particular area, as well as their correct names. Unless they are on the way to becoming enthusiasts, homeowners will rarely remember the names of plants they buy. They

POLYANTHA ROSES

2-year field-grown. Budded low on Rosa Multiflora Japonica. Guarante true to label. Packed in sphagnum mo-Special on Polyanthas.

Price Grade No. 1, Price Grade No. 1½, 5c each Price Grade No. 2, 4c each

Price Grade No. 2, 4e
Baby Doll, or Tip-Top
Baby Tausendschon
Chatillon Rose
Eblouissant
Ellen Poulsen
Else Poulsen
George Elger
Gloria Mundi
Golden Salmon
Gruss an Aachen
Ideal Golden Salmon Gruss an Aachen Ideal Katharina Zeimet Kirsten Poulsen Lafayette Miss Edith Cavell Mrs. W. H. Cutbush Salmon Spray Triomphe Orleanais Verdun

General assortment Hybrid Teas, Hybrid Perpetuals, Rugosas and Climb-ers. Write for list.

ROSEMONT NURSERIES

Box 839, Tyler, Texas

Surplus Evergreens

Black Hills Spruce

2 to 3 ft., xxx, B&B.\$1.15 \$1.00 3 to 4 ft., xxx, B&B..... 1.40 4 to 5 ft., xxx, B&B..... 1.65 1.25 1.50

Colorado Blue Spruce 2 to 3 ft., xxx, B&B..... 3 to 4 ft., xxx, B&B..... 4 to 5 ft., xxx, B&B..... 1.50 2.00 2.65 2.50

Colorado Green Spruce 2 to 3 ft., xxx, B&B... 1.15 .90 3 to 4 ft., xxx, B&B..... 1.40 4 to 5 ft., xxx, B&B..... 1.65 1.25 1.50

.90

Pyramidal Arbor-vitae

2 to 3 ft., xxx, B&B..... 1.00 3 to 4 ft., xxx, B&B..... 1.25 4 to 5 ft., xxx, B&B..... 1.50 1.00 1.35 Austrian Pine

5 to 6 ft., xxx, B&B. 6 to 8 ft., xxx, B&B..... 2.65 2.50 Visit our nurseries and make your Write for our comown selections.

RIVERSIDE NURSERIES, INC.

Box 113 Thiensville, Wis.

LARGE SPECIMEN **EVERGREEN** TREES AND SHRUBS **DECIDUOUS** TREES AND SHRUBS

for immediate effect

TOWSON NURSERIES, INC.

TOWSON, MARYLAND

Send for special list

TAXUS

Taxus cuspidata, propagated from cut-tings of the improved dark green strain. 15 to 18-inch size ideal for dwarf hedges.

	Ea. per 1000
15 to 18 ins. heavy, from beds, XX B&B	\$0,55
18 to 24 ins. light XXX B&B 1.25	1.15
18 to 24 ins. heavy XXX B&B 1.50 2 to 2 ½ ft. XXX B&B 2.00	1.35 1.85
TAXUS HICKSII, 18 to 24 ins	.60

Juniperus Depressa Plumosa Write for quotations.

We also have larger Taxus, including trimmed specimens up to 4 and 5 ft. high.

Taxus headquarters - over 100,000 plants.

THE W. A. NATORP CO.

Cincinnati, Ohio

EVERGREENS



The largest stock of upright and spreading Taxus, Junipers, Spruces, Reti-nisporas, Arbor-vitzes and Broad-leaved Evergreens to select from in the state. There is an evergreen for every purpose.

As well as the best grown deciduous and flowering trees, shrubs and roses. Write for our spring 1939 wholesale trade list.

THE KALLAY BROTHERS CO.

Painesville, Ohio

European Sycamore

R. C., 18 to 24 ins., \$20.00; 2 to 3 ft., \$25.00; 3 to 4.ft., \$30.00.

Wisconsin Willow

R. C., 3 to 4 ft., \$20.00; 4 to 5 ft., \$25.00; 5 to 6 ft., \$30.00.

Complete line of general nursery stock

T. B. WEST & SON

Maple Bend Nurseries Perry, Ohio

WHOLESALE GROWERS

Specializing in
EVERGREEN SEEDLINGS
TRANSPLANTS AND APPLE TREES
Write for price list.
Send us your trade list.

MATHEWS EGGERT NURSERY North Muskegon, Mich.

LINING-OUT STOCK and FINISHED MATERIALS

Evergreens, Deciduous Trees and Shrubs

Catalogue on request

Not in the Jap Beetle Quarantine Zone FAIRVIEW EVERGREEN NURSERIES Fairview, Erie County, Pa.

GINKGO

.....\$155.00 per 100 6 to 8 to 10 ft. . .. 220.00 per 100 Packing extra

J. FRANKLIN MEEHAN & SONS, INC. MT. AIRY, PHILADELPHIA, PA

may wish to know the correct names later and, lacking labels, may concoct puzzling and meaningless combinations which may be offered with complete sincerity as coming directly from the nurseryman who supplied the plants. Inconspicuous, fairly lasting labels obviate these difficulties, and they may be the means of stimulating a pride and interest in plantings which nourish real gardening enthusiasm and bring more orders to the nursery.

Whether to use scientific names or common ones is a question. Most embossed metal-strip labels cannot carry both without becoming too large-especially names of the muchdeveloped ornamental conifers, which are apt to become confused anyway. Whatever name is used, pains should be taken to be sure it "Standardized Plant is correct. Names" is the best reference for plant names in the horticultural trade, and this work of the American Joint Committee on Horticulture Nomenclature has done infinite good in bringing order out of the confusion existing formerly. The new edition of "Standardized Plant Names" soon to appear contains much-enlarged and more complete lists of plants in American commerce, with both scientific and common names brought to date.

Retail nurseries and all establishments drawing some of their clients from adjacent districts will often be called on to diagnose disease and insect troubles and to recommend fertilizer treatments and other items of maintenance. This furnishes a natural path for developing the interest of property owners and paving the way for better plantings-better not only in the maintenance, but also in new ones which will be made. Such advice can be amplified with information and with state and Department of Agriculture bulletins from county agricultural agents. These representatives of the state colleges, usually having offices at the county seats, are more than willing to cooperate with commercial plants men in disseminating information about ornamental plants and home grounds.

L. C. CHADWICK, of Ohio State University, became a father February 17, when Mrs. Chadwick presented him with a daughter, Barbara Alice, at the University hospital, Columbus.

The

PAUL OFFENBERG NURSERY

Company

1988 East Livingston Avenue COLUMBUS, OHIO

Lowest Prices

Highest Quality

EVERGREENS

for Lining out

Grafted plants 50,000 out 21/2·in. pots Grafted plants, 1·yr. field Grafted plants, 2·yr. field

Cuttings, rooted, out of the bench Cuttings, Bare roots, 1-yr. field Cuttings, Bare roots, 2-yr. field

Ask for Special list

PFITZERS

AND OTHER

SPECIMEN EVERGREENS

30 Acres Choice Finished Stock

ZEPHYR HILL NURSERY

YELLOW SPRINGS PIKE Springfield, Ohio Phone 2-4712

Visit Our Nursery

Flowering Crab Grafts

Fine bench grafts ready to line out; plump scions grafted on whole Freach Crab. \$5.00 per 100.

Bechtel's

Bechtel's
Floribunda
Eleyi
Niedawetzkyana
Scheldeckeri
Nice lot of French Lilae grafts.
Red-leaf Barberry, Dutchman's-pipe,
Hydrangea, etc.

The Harmon Nursery

Prospect, Ohio

BARBERRY SEEDLINGS

1 and 2-year

Few thousand Atropurpurea left. Most any quantity Thunbergii

COOK'S NURSERIES

ENGLISH BOXWOOD

Plants 6 ins. to 20 ins. Largest grower of English boxwood in the south. Write for wholesale price list.

F. L. JOHNSON, Mount Airy, N. C.

AMOOR RIVER NORTH

and CALIFORNIA PRIVET General Nursery Stock, Roses, Apple and Pear scions. Will exchange for liners. Write for New Spring Price List.

EMPIRE NURSERY and ORCHARD ne of the South's Foremost Nurs Baileyten, Alabama

Southern Tree Conference

Meeting of Professionals and Laymen Held at University of Florida in Interests of Preservation and Care of Shade Trees

The Southern Shade Tree Conference was held at the University of Florida, Gainesville, February 23 and 24. Arrangements for this conference were made by a committee composed of Mrs. L. T. Nieland, Gainesville; Ross Farrens, of the Farrens Tree Agency, Clearwater; Norman Armstrong, arborist, White Plains, N. Y., and H. S. Newins, director of the school of forestry, University of Florida, as chairman.

The purpose of the conference was to bring about a closer unity between the professional so-called "tree expert" and the layman and to inform the public of the importance of shade trees, their preservation and care.

The conference members were greeted with an address of welcome by Wilmon Newell, provost for agriculture at the university. The history of the National Shade Tree Conference was outlined in a paper prepared by Karl Dressel, president of the National Shade Tree Conference. C. N. Elliott, director of the division of state parks, Atlanta, Ga., cited the shade tree problems in Georgia, and Gilmore Pugh, landscape engineer of the Birmingham beautification board, discussed the problems confronting Alabama shade tree workers. The damage done to shade trees in New England by the recent hurricane was outlined in a paper by O. W. Spicer, president of the Bartlett Tree Expert Co., Stamford, Conn.

H. Harold Hume, dean of the college of agriculture, spoke on the university conservation reserve at Welaka, Fla., recently acquired from the Farm Security Administration. Fred H. Heath, department of chemistry, explained the process of anesthetizing large trees for purposes of moving. A paper by E. J. Miller, chemist, Michigan State College, discussed the use of wax emulsion to retard desiccation.

Mrs. W. S. Jennings, chairman of the beautification committee of the state chamber of commerce, Jacksonville, called the attention of the conference members to the need for proper legislation for the continuance of the Everglades National park project. D. R. Matthews, member of the state Lion's Club committee, outlined the part the Lion's Club has played in promoting the Everglades National park development. Landscape work upon the national forests, under the supervision of W. H. Reinsmith, landscape architect of the United States forest service, Atlanta, Ga., was discussed.

John W. Wilson, assistant professor of electrical engineering, and F. E. Smith, professor of electrical engineering, gave a demonstration of lightning protection. A talk entitled "Notable Trees of Florida" was presented with lantern slides by W. F. Jacobs, assistant state forester, Florida forest and park service.

W. A. Murrill, of the University of Florida, explained "How Our Trees Happen to Be Here." Other interesting talks were: "Business Ethics of Shade Tree Work," by Norman Armstrong; "Arboriculture—A Phase of Forestry," by A. Robert Thompson, of the national park service, Washington, D. C., and "City Park Planning," by H. L. Flint, a fellow in the American Society of Landscape Architects. A radio address was given by J. O.

3,000 1	dy Poplar ¼-in. cal ½-in. cal		30.00	\$250.0
4,000 2	to 3 ft to 4 ft			40.6
1,000 3 1,000	Honeysu to 4 ft. 2 to 3 ft. 8 to 24 ins	ekle	18.00 12.00	150.0 100.0 80.0
	Grapes year No.	1	3.00	25.6
Packing 1000	ng at com	t; 25 a	100	rate, 25

NAGLE'S NURSERY Benton Harbor, Mich.

TAXUS HEADOUARTERS

Brevifolia Capitata Cuspidata Intermedia Media Hatfieldii Media Hicksii

Write Us

JACKSON & PERKINS COMPANY

Newark, New York

Kirby, of the United States forest service.

Director Newins talked about the Austin Cary memorial forest of the university, its purposes and value. A discussion prepared by J. C. Gifford, professor of tropical forestry at the University of Miami, was given on the shade trees of southern Florida, by A. D. Barnes, superintendent of Dade county parks, Miami.

Ernest O. Buhler, in charge of community forests of the United States forest service, Washington, D. C., discussed the value of such a project to a forest community. J. T. Creighton, professor of entomology and plant pathology, explained the control of shade tree insects. Wesley O. Hollister, secretary of the National Arborist Association, Kent, O., spoke on "Legislation and the Arborist." He showed how delegates could aid in passing various laws.

Several resolutions were passed and a general discussion was held before the Friday afternoon session was adjourned.

Mrs. L. T. Nieland; R. M. Weakley, director of the Howard Tree Research Laboratories of Pennsylvania; Mrs. Fred B. Noble, chairman of the publications committee of the Federated Circles of the Garden Club, Jacksonville, and H. S. Wolfe, head of the

HARDY PLANTS

Transplanted to field spring	g 1938	3.
Alyssum Saxatile Compac-	100	1000
tum		\$30,00
Ajuga Reptans	5.00	40.00
Aster Barr's Pink		65,00
Aster Climax	5.00	40.00
Cerastium Tomentosum	4.00	35.00
Campanula Glomerata Su-		
perba	6,00	55.00
Daisy Elder Imp., divs., \$2.00		
per 100	6.00	55.00
Daisy Shasta The Speaker	5.00	45.00
Delphinium Belladonna	4.00	35.00
Dianthus Plumarius, dbl. old-		
fashioned	4.00	35,00
Dianthus Plumarius, sgl. old-		
fashioned	4.00	35,00
Helianthemum Fire Ball, dbl.		
red; 2-in. pots	5.50	50,00
Helianthemum Yellow Ball,		
dbl. yellow; 2-in. pots	7.00	
Veronica Longifolia Subses-		
silis, true	6.00	50.00
New surplus list now ready. Y	Write	for it.
FOX NURSERY EIKI	art,	Ind.

ORDER NOW

ASTER HARRINGTON'S PINK

The outstanding true pink Hardy Aster

3-in. pots . . \$25.00 per 100

BAY STATE NURSERIES

INCORPORATED

NORTH ABINGTON, MASS.

LINING-OUT **EVERGREENS**

Seedlings, assorted varieties and sizes:
Fir Pine
Arbor-vitæ Spruce
Rooted Cuttings, assorted varieties and

Arbor-vitæ Juniper
From 2¼-inch Pots, assorted varieties
and sizes:
Arbor-vitæ Juniper

Attractive prices and variety list on Note: On potted liners we offer stock of definite and stated sizes.

SHERMAN NURSERY CO.

EXTRA FINE, VIGOROUS

Red Pine (Pinus resinosa) 6 to 10 ins., 4-yr. transplants...36.50 \$45.00 5 to 7 ins., 3-yr. seedlings..... 3.00 18.50

White Pine (Pinus Strobus) 4 to 6 ins., 3-yr. seedlings..... 2.00

Carefully dug and packed. Shipped by Express unless otherwise directed. 5 per cent discount and no packing charge for cash with order.

THE W. C. TROUT NURSERY

3940 Fourth St. Road Jackson, Mich.

HILL'S EVERGREENS

omplete assortment of lining-out sizes Also larger grades for landscaping Send for our wholesale catalogue

D. HILL NURSERY CO. D. HILL NORSHIP
EVERGREEN SPECIALISTS
Largest Growers in America
402
DUNDEE, ILLINOIS

COMPLETE STOCK

Lining-out Evergreens and Shrubs SCOTCH GROVE NURSERY
Scotch Grove, Iowa

HERBS

Pot-grown plants; ever a hundred varieties. Dried Herbs for Flavering and Fragrance. Other plants of unusual character and with the charm of old-time gardens.

WEATHERED OAK HERB FARM, INC. Bradley Hills, Betheads, Marvland

SPECIAL OFFER—CUSHION MUMS

OI LUPAL OI I EN COUSSION FOR THE STATE OF THE SAME HATCH AZALEA FLOWERED MUNS. CAN TOU AFFORD NOT TO OFFER THEM 1977 PINK CUSHION, 32.50 per 100; 32.00 per 1000 RED, WHITE, BRONZE, \$8.00 per 100 THE NEW YELLOW CUSHION, \$1.00 per 100 STRONG WELL BOOTED PLANTS READY

WONDERLAND NURSERIES, Ellerson, Va.

PHLOXES

If interested, write for price list. Can ship any time.

HENRY LE POIRE Zeeland, Mich.

for Spring planting Ask for Spec ial Offe The Cottage Gardens Lansing, Mich.

department of horticulture, presided over the sessions of the conference.

The Southern Shade Tree Conference was concluded with a banquet, which was preceded by a reception in Bryan Lounge, attended by many visitors from throughout the south. W. F. Jacobs presided over the gathering as toastmaster. Mrs. Linwood Jeffreys, secretary of the Florida board of forestry, Jacksonville, spoke on "Florida State Parks" and in particular the work of the Florida board of forestry in the establishment of these parks.

The 1940 Southern Shade Tree Conference will be guided by R. M. Weakley; Mrs. Porter Baldwin, president of the Florida Federation of Garden Clubs, and H. S. Newins.

LOW TEXAS FREIGHT RATE.

By application of the railroads to the Texas railroad commission to remove the expiration date from item 2085-B, supplement 31, tariff 60-C, it is expected that the present intrastate rate for balled and burlapped nursery stock will continue, according to W. C. Griffing, of Griffing Nurseries, Beaumont, Tex. He hopes it is possible to obtain the same rate for all the southwestern states and possibly to reduce rates on balled and burlapped stock in Texas, with the result that most of the stock would be transported by rail rather than by truck.

HOUSTON RADIO TALK.

As guest speaker on a series of garden programs conducted by the Garden Club of the Air and sponsored by the Gulf Oil Co., G. Bobb Head, Jr., a young landscape artist with the Griffing Nurseries, gave a lecture on "Spring Gardens" recently. These programs are directed by Mrs. Ralph Conselyea, program chairman, and may be heard each Wednesday and Friday at 10:30 a.m. over station KPRC, Houston, Tex. The talk on spring gardening by Mr. Head was in keeping with the National Garden Club convention then in session at Houston.

THE McKay Nursery Co., Madison, Wis., recently purchased a 160acre farm adjoining one of the nurseries at Waterloo. This additional land will be used for feeding livestock to furnish barnyard manure for soil building. The firm now has an acreage of approximately 400 acres.

SPECIAL 10,000

SILVER LACE VINES

(Polygonum Aubertii) 2-year No. 1.

\$10.00 per 100 \$1.50 per 10

Grown by experts Write for our Complete Wholesale Catalogus.

KRIDER NURSERIES, Inc. Middlebury, Indiana

HOLTON & HUNKEL CO.

Juniperus Pfitzeriana, Spread-ing. 18 to 24 inc.

Black Hills Spruce

3 to 31/2 ft., xxx, B&B..... 2.00 1.50

Juniperus Virginiana Keteleeri

2½ to 3 ft., xxx, B&B..... 2.00 1.75 2 to 3½ ft., xxx, B&B..... 2.25 1.90

Write for complete list of evergreens!

P. O. Box 1747 Milwaukee, Wis.

EVERGREENS

Lining-out and Specimens Fruits and Shrubs Write for price list J. V. BAILEY NURSERIES Daytons Bluff Sta. St. Paul, Minn.

LINING-OUT STOCK B & B EVERGREENS

Write for our complete catalogu T. G. OWEN & SON, INC. uth's Largest Florists and Nu Columbus, Miss.

WILLIS NURSERY Co.

Wholesale Nurserymen

Write for Catalogue

OTTAWA KANSAS



EVERGREENS

For Seventy-five Years Growers of Quality Evergreens Lining-out Stock a Specialty Write for Trade List

EVERGREEN NURSERY CO.

ELMS FOR SALE

Will sell cheap 2000 American—1000 Chinese Elms 2 to 3-in, caliper, 12 ft. high 1000 choice Evergreens.

M. SCHIESSLE, PARK RIDGE, ILL. 12 miles northwest from Chicago loop

AMOOR RIVER NORTH PRIVET HEDGING

pennies 7.59
Spirma Frebeli, 6 to 15-in. liners. 12.59
Packing free. These low prices are based on cash with order or 25 per cent down with order, balance c.o.d.

ALTA VISTA NURSERIES

ANALYSING ADVERTISING

XI.

Visualizing the customer you wish to serve not only prevents your taking in more territory than your type of business warrants, as suggested in the preceding issue, but it also is useful in the preparation of advertising copy.

One advertising man who achieved a notable reputation for his sales literature attributed his success to that very thing. In preparation for writing a form letter or a circular, he dictated a personal letter to a person who was exactly representative of the group he wished to reach. In so doing he made his statements definite and concrete, directly to the point, instead of vague and wide-spreading as is apt to be the case with form letters written as such. When the letter had been dictated, he pruned out of it any personal references, so as to make its message of more general application.

The nurseryman may find himself a better advertising copy writer than he expected if he will forget for the moment that he is writing for publication and merely put down on paper just what he would say directly to a customer either about his service or about the stock he wishes to sell. When the meat of the message is once set down, it is then easy to determine how it is to be presented—headlines, display, illustrations, etc.

Glittering adjectives may add emphasis or enthusiasm to advertising copy, but the words that do the selling are the statements of fact in nouns and verbs. Just as the habitual user of profanity is left without means to convey extreme emotion in a crisis, so the habitual user of such adjectives as "beautiful," "lovely," "charming," etc., finds it difficult to distinguish in plant descriptions between the items that are merely pleasing and those that are really striking.

Speaking to a customer in the field, you would point out the individual qualities of a plant, those things that differentiate it from others, making it a superior sort that you wish to recommend. The same direct approach in advertising copy is most certain to get your ideas across. "Write as you would talk" is an old bit of instruction,

but still excellent advice. If you know your plants, you have no difficulty in talking about them effectively.

GOTHAM FAIR PLANTINGS.

In spite of what may be termed a rather severe winter in and around New York, considerable progress has been made on the plantings at the New York world's fair. The nurserymen and landscape contractors feel that their work can be considered right up to schedule, along with other construction programs on the fairgrounds, and that the planting will all be in readiness for the opening of the fair, May 1.

The Outpost Nurseries, Ridgefield, Conn., are doing the planting at the American Bell Telephone Co. building, which is the largest landscape planting on the fairgrounds. same firm is doing the landscaping for the Radio Corp. of America, General Electric Co., Petroleum Industries, Budd locomotive works, United States government building, Missouri state building, Electric Utilities Farm Group, Standard Brands, Inc., and a planting contract known as No. 99-238, which includes two miles of highly landscaped section running along the entire east boundary line of the fair-

-LINING-OUT EVERGREENS-

	JUNIPERS	1000 lot
	Per 100	per 100
	Andorra, 8 to 10 ins. TT\$15.00	\$13.00
	Andorra, 10 to 12 ins. TT 20.00	18.00
	Canadensis, 6 to 8 ins. TT 15.00	13.00
	Tamariseifolia, 8 to 10 ins. TT 17.00	15.00
	Waukegan, 8 to 10 ins. TT 15.00	13.00
	Horizontalis, 8 to 10 ins. TT 15.00	13.00
	Horizontalis Alpina, 10 to 12 ins. TT. 15.00	13.00
500	Blue Creeping, 8 to 10 ins. TT 15.00	13.00
	BUXUS	
	Sempervirens, 10 to 12 ins. TT 12.00	10.00
450	Suffruticosa, 8 to 10 ins. TT 20.00	15.00
:	25 at 100 rate, 250 at 1000	rate.
Name of	longudones Nurserles	· Vma

NORTHERN NURSERYMEN

For a full line of NORTHERN-GROWN Nursery Stock, including Forest Trees, Shade Trees, Fruit Trees, Shrubs, Flowers and Small Fruits, see March 1 issue

American Nurseryman page 22.

ORDER NOW FOR IMMEDIATE DELIVERY!

THE HOUSE OF GURNEY, Inc.

Yankton, South Dakota

grounds and the Flushing Meadows park.

This company is also planting Sun Valley, the winter wonderland, for Swain Nelson & Sons Co., Glenview, Ill., and is supplying the large trees and other plant materials for the General Motors building, which is being planted by Clauss Bros., Chicago.

Outpost trees are also being used at the administration building, Gardens on Parade, Constitutional Mall, Theme Center, Spiral garden, Avenue of Pioneers and the Avenue of Patriots.

Much has been accomplished since Outpost Nurseries planted the first tree, a 40-foot oriental plane tree, April 6, 1937, on what was then 1,000 acres of barren ash dumps and which, at the opening of the fair, will have been transformed into one of the greatest and most picturesque gardens ever developed in this country.

Henry Nye, in charge of the world's

BARGAINS

TO CLOSE OUT SURPLUS

diate effect.	
10	100
Acanthopanax Pentaphyllum (A	ralia).
4 to 5 ft., well branched \$2.50	\$22,50
3 to 4 ft., well branched 2.00	17.50
2 to 3 ft., well branched 1.50	12.50
Exochorda Grandiflora (Pearl-B	ush).
5 to 6 ft., well branched \$2.50	\$22,50
4 to 5 ft., well branched 2.00	17.50
3 to 4 ft., well branched 1.50	12.50
Forsythias, Fortunei, Intermedia	a, Viri-
3 to 4 ft., well branched . \$1.50	\$12.50
2 to 3 ft., well branched. 1.25	10.00
18 to 24 ins., well branched .75	6.00
	0.00
Jasminum Nudiflorum. 24 to 30 ins., bushy\$2.50	920.00
18 to 24 ins., bushy 2.00	17.50
Lonicera Fragrantissima,	
4 to 5 ft., well branched. \$2.50	\$20.00
3 to 4 ft., well branched 1.75	15.00
	10.00
18 to 24 ins., well branched .75	6,00
Chinese Magnolia, Purple Saucer	B&B.
5 to 6 ft., heavy\$30.00	
4 to 5 ft., heavy 25.00	
3 to 4 ft., heavy 15.00	
Philadelphus, Coronarius, Grand Lemoinei.	liflorus,
5 to 6 ft., heavy branched.\$2.00	\$17.50
4 to 5 ft., heavy branched. 1.75	15.00
3 to 4 ft., heavy branched. 1.25	10.00
Spirsen Anthony Waterer.	10.00
2 % to 3 ft., heavy, bushy. \$2.75	#2F 00
2 to 2½ ft., heavy, bushy. 2.25	\$25.00
18 to 24 ins., heavy, bushy 1.75	15.00
	10.00
Spiraea Prunifolia.	
5 to 6 ft., heavy, bushy\$3.25	\$30,00
4 to 5 ft., heavy, bushy 2.75	25.00
3 to 4 ft., well branched 1.75	15.00
Spirma Thunbergii.	
3 to 4 ft., heavy clumps. \$2.75	\$25.00
30 to 36 ins., heavy clumps 2.25	20.00
Spiræa Vanhouttel.	
5 to 6 ft., heavy clumps \$2.25	\$20.00
4 to 5 ft., heavy clumps 1.75	15.00
3 to 4 ft., heavy clumps 1.25	10.00
Windowston Warran a way a see	

FRASER NURSERIES, INC.

Weigelas, Rosea and Hendersonii, 5 to 6 ft., well branched \$3.00 4 to 5 ft., well branched . 2.25 3 to 4 ft., well branched . 1.75

P. O. Box 465,

Birmingham, Ala.

Attention Please!

Maloney Bros. Nursery Co. Wholesale surplus list offers many bargains.

Fruit Trees, Shrubs, Roses, Evergreens. Write for it today. We have every fa-cility for packing out dealers. Try us.



Maloney Bros. Nursery Co. Dansville, New York

We specialize in APPLE AND PEACH TREES

Strawberry, Asparagus, Raspberry and

Blackberry plants. Grapevines, 1 and 2-year.

OUR MANY YEARS PRODUCTION EXPERIENCE COMBINED WITH OUR FAVORABLE LOCATION ENABLES US TO OFFER STOCK THAT MUST PLEASE AT PRICES YOU WILL APPRECIATE.

Submit your definite list for quota-

BOUNTIFUL RIDGE NURSERIES Princess Anne, Md.

THE CRESCO STRAWBERRY

"A superior Dunlap type"
Ask for circular
500 plants...\$6.50 5000 plants.\$45.00
1000 plants... \$9.55 10000 plants. \$5.00

W. A. Bents Nurseries Cresco, Iowa

Our Specialties Are GRAPEVINES, CURRANTS, STRAWBERRIES General line of Small Fruit plants

L. J. RAMBO'S WHOLESALE NURSERIES Bridgman, Mich.

SMALL FRUIT PLANTS

Evergreens - Shrubs Lining-out Stock SCARFF'S NURSERIES

CHIEF RASPBERRIES RED LAKE CURRANT

Hardy Fruit Tree Seedlings Manchurian Crab Americana Plum ANDREWS NURSERY CO. Faribault

Wholesale Growers of

Grapevines, Currants, Gooseberries, Blackberries and Raspberries Let us quote on your requirements

FOSTER NURSERY COMPANY, INC. Fredonia, N. Y. 69 Orchard St.

STRAWBERRY AND SMALL FRUIT PLANTS fair landscape division, reports that of the many hundreds of large trees planted the loss will be somewhat less than one per cent, which is a new high in successful transplanting of large trees, that only a few years ago normally reached more than ten per cent.

NEW YORK STATE NEWS.

Inasmuch as the nurserymen's case on unemployment insurance before the industrial commissioner of the state department of labor was denied last January, an appeal has been filed with the board of appeals of the department of labor on the basis that the decision was erroneous both in law and in facts, according to Paul V. Fortmiller, chairman of the legislative committee of the New York State Nurserymen's Association. His committee is working in cooperation with one from the Long Island Nurserymen's Association and one from the Allied Retail Nurserymen's Association, being represented by counsel and prepared to fight to the limit.

The same groups are working in behalf of a state appropriation for research. Special bills introduced in the legislature in 1937 and 1938 failed to pass. Though the item was unanimously approved by the agricultural conference board and by the board of trustees of Cornell University, it was struck out by the governor's budget committee this year. Efforts are being made to restore it in the supplemental budget.

The committee has taken up with the commissioner of labor the definitions of agricultural labor and outside salesmen in the proposed state wages and hours bill, and a conference will be held if the legislation becomes

THE Bay City Nursery has been established at 3116 Pico boulevard, Santa Monica, Cal., with Roland J. Gaupel as the manager.

ADOLPH GASCH, Arlington Heights, Ill., when returning from Rockford, March 4, encountered two men dressed in furs walking along the highway. These men, accompanied by a dog sled mounted on wheels and drawn by eight Huskies, were headed for the New York world's fair. They had started from their homes in the Canadian Arctic circle. Mr. Gasch gave the men and dogs a ride to Dundee, which was greatly appreciated.

WHOLESALE TRADE LIST JUST ISSUED

Lower prices on Evergreens, Decidu-ous Trees, Shrubbery, Berry Plants, Bar-berry Thunbergii, green and red; Ever-green Barberry, Glossy Privet, California Privet, Lining-out Stock, 2-yr. Budded Apple Trees, Peach Trees in quantity— Hale Haven, South Haven, Elberta, etc.

It would be to your interest to have our new trade list which will be mailed on request. For large quantities mail us list for Special Letter Prices.

The Westminster Nurseries WESTMINSTER, MARYLAND

NURSERY

McMinnville, Tennessee

WHOLESALE GROWER

Tree Seedlings and Lining-Out Stock

Write for Prices on Peach Pits

POPLAR TREES

(Twice Transplanted) SIMON'S POPLAR

Each Each 6 to 8 ft. 40c 11/4 to 11/2-in. cal. .65c 8 to 10 ft. 50c 11/2 to 2-in. cal.........75c

BOLLEANA POPLAR

Each 6 to 8 ft. 50c 11/4 to 11/2-in.cal. \$0.85 8 to 10 ft. 65c 11/4 to 2-in. cal. 1.00

RIVERSIDE NURSERIES, INC.

Box 113

Thiensville, Wis.

THE NEW FREDONIA GRAPE

Grown in the famous Chautauqua-Erie Grape Belt.

Strong 1-year, No. 1 Vines LOW WHOLESALE PRICES.

FAIRMOUNT FARM Perrysburg, N. Y.

ELBERTA PEACH TREES

and other leading varieties Maples - Ilex Crenata - Pin Oaks Quality Line Priced to Sell HOWARD-HICKORY CO. Hickory, N. C.

STRAWBERRY PLANTS

pecial low prices on 10 leading varieties Northern-Grown Plants. General line of Small Fruit Plants, Rhubarb and Asparagus Roots. Ask for our Latest Price List KRIEGER'S WHOLESALE NURSERY Bridgman, Michigan

GRAPEVINES

Complete list of varieties, with special offer on Fredonia and Portland cuttings and lining out.
Send list of your wants in small fruits.
H. E. Congdon Nursery
North Collins, N. Y.

Coming Events

CENTRAL PLANT BOARD.

The fifteenth annual meeting of the Central Plant Board, which is made up of representatives from the states of Michigan, Ohio, Indiana, Kentucky, Wisconsin, Illinois, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska and Kansas, will be held at the Hotel Lowry, St. Paul, Minn., March 21 and 22. All nurserymen are urged to attend this meeting, at which time will be given for the discussion of any topic that the nurserymen may wish to bring up. The program fol-

MARCH 21, 7:30 P. M.

Report of the secretary and treasurer, by P. T. Ulman, Indiana.

Appointment of committees by President L. M. Gates, Nebraska.

President's address, by L. M. Gates. Report of representatives on the National Plant Board, by E. L. Chambers, Wisconsin, and Carl J. Drake, Iowa. J. C. Dawson, Missouri, alternate.

MARCH 22, 9:30 A. M.

"Emergency Insect Control Appropria-tions," by T. L. Aamodt, Minnesota. "Nationally Controlled Interstate Ship-ment of Nursery Stock," by E. L. Cham-

Round-table discussion by states.
"Present Restrictions on the Introduction and Interstate Movement of Living Insects and Plant Pathogens," by E. R. Sasser, United States Department of Agriculture.

"European Corn Borer in Indiana," by

Frank N. Wallace, Indiana.

Report by states "Symptoms and Nature of Relatively New Strawberry Troubles," by J. B. Demaree, United States Department of Agriculture.

MARCH 22, AFTERNOON.

"Observations on Insects in South America Likely to Be Introduced into the United States," by C. J. Drake, Iowa. E. C. Stackman, University of Minne-

sota, will speak on a subject that is to be selected.

"Alfalfa Weevil Developments," by C. M. Packard, United States Department

of Agriculture.
"Revision of the Federal Plant Quarantine Act," by Lee A. Strong, chief of the bureau of entomology, United States Department of Agriculture

"The Use of Methyl Bromide for the Treatment of Quarantined Plant Products," by Lon A. Hawkins, United States Department of Agriculture.

Japanese Beetle in 1938," by Erle G United States Department of Agriculture.

Report by states.

Informal dinner for regulatory officials to be held at 6 p. m.

Executive session for all regulatory of-

THE C. C. Mossbolder Nursery has been established at Burbank, Cal.

LANDSCAPE MEETING.

The landscape architecture section of the Michigan Academy of Science, Arts and Letters will hold a meeting March 17 and 18, at the Michigan Union, Ann Arbor. T. Glenn Phillips, chairman of the landscape section, will preside. The program follows:

MARCH 17, 10 A. M.
"Some New and Unusual Plant Materials for Michigan Parks and Gardens," by R. D. Slack, department of landscape design, University of Michigan

"Growing Rhododendrons, Azaleas and Other Ericaceous Plants in Michigan Parks and Gardens," by E. M. Stanton, West-croft Gardens, Grosse Ile.

"Studies on the Recreational Use of Land in Cheboygan County," by Wendall Taylor and H. W. Whittemore, department of landscape design, University of

Michigan. MARCH 17, 1:30 P. M.

"Improvement in Michigan State Parks by the C. C. C.," by W. J. Kingscott, superintendent of Michigan state park

"Interesting and Unique Developments the Waterloo Project, Chelsea, Mich.," by Hubert A. Lamley, superintendent of

the Waterloo project.
"Planting Design, an Asset or a Liability in Architectural Composition," illustrated, by A. D. Taylor, landscape architect, Cleveland, O.

Annual dinner, section of landscape architecture, Michigan Academy of Sci-

ence, at 6 p. m.

Professional practice. Symposium: President's address.

MARCH 18, 9:30 A. M "Preparing and Handling a W. P. A. Project for Landscape Development," by G. D. McCallum, assistant superintendent of parks, Flint.

"Planning and Developing the Modern Farmstead: Functional Aspects," by Harry M. Musselman, agricultural engineering

department, Michigan State College.
"Planning and Developing the Modern
Farmstead: Development Aspects," by Roy B. Hull, Purdue University.

"Landscape Architecture in China," by

Florence Robinson, department of land-scape architecture, University of Illinois.

MARCH 18, P. M.

Business meeting.
Open meeting, Detroit chapter, American Society of Landscape Architects.

SOUTHWESTERN NOTES.

Roy F. Jennings, Garden City, Kan., is planning to enter the nursery business in the near future.

John Nagle, Englewood, Colo., a suburb of Denver, reports that he is starting a nursery.

Tom Kiser has established a nursery at Big Spring, Tex. He is planning to set out five or six acres of trees and plants.

The week of February 20 the southwest was visited by a severe cold wave, which extended into Texas and Louisiana. In some sections the temperature dropped as much as 60 degrees in twenty-four hours, the resulting cold being so severe as to stop all outdoor nursery operations. There have been no reports of serious injury to nursery stock in the field, however. It is believed that nursery stock in Louisiana and Texas was not far enough advanced to be hurt. There is a general deficiency of moisture over the southwest, in some places of serious proportions. This lack of moisture may be a determining factor in the amount of nursery business done in the spring.

D. L. Moody, who has been a tree surgeon at Kansas City, Mo., since 1927, is starting a landscape nursery.

Fred Eshbaugh, nurseryman at the Fort Hays experiment station, Hays, Kan., recently visited nurseries at Ottawa and Manhattan. Under a new policy recently adopted, the Hays station will no longer grow nursery stock, but will continue to distribute it under the Clarke-McNary act. The station has plans for increased experimentation on plant material suitable for western Kansas.

W. R. Yerkes, Jr., Hutchinson, Kan., began work February 1 for the Sarber Nursery Co., Topeka, as landscape architect. Mr. Yerkes, who is a graduate of Kansas State College, is

ROSES FOR SPRING SALES

Place your orders now for spring delivery to assure you of the varieties you want. Below is a partial list of our varieties:

Catalonia Catherine Korde

ORANGE

YELLOW Golden Dawn Joanna Hill Mrs. E. P. Thom Sister Ther Ville de Paris

PINK
Edith Nellie Perkins
J. Otto Thilow
Susan Louise

TRI-COLOR Betty Uprichard Hinrich Gaede President Hoover Talisman

We still have a We also have many others. Send for complete list with prices. complete line of Baby Roses for forcing in the No. 1 grade only. Use business stationery plea

PETERSON & DERING, INC.

Wholesale Bose Growers

Scappoose, Oregon



WRITE for our 1939 descriptive Wholesale Trade List. (For the trade only) Lining-out Stock

Balled Stock Fine Pfitzer Juniper Cuttings now ready.

SHERWOOD NURSERY CO.

Evergreens Propagators & Growers PORTLAND, ORE. 141 S. E. 65th Avenue Remember the Conce

Portland Wholesale Nursery Co.

306 S. E. 12th Avenue Portland, Oregon

To the Trade Only

A complete line of Nursery Stock and Nursery Supplies.

Catalogue sent on request.

A. McGILL & SON

FAIRVIEW, OREGON Wholesale Only

ROSES

Send us you list of wants

Fruit Tree Seedlings Flowering Ornamental Trees **Shade Trees**

Grown right and packed right

Combination carloads to eastern distrib-uting points save you on freight.

THORNLESS HONEY LOCUST

*Mile-high grown.
3-yr. transplanted, well branched trees with strong, straight central leader, positively no

4 to 5 ft.....10, \$3.00; 100, \$24.00 2 to 4 ft.....10, 2,00; 100, 16.00

\$ ts 4 ft.....10, 2.00; 100, 16.00

"Almost Thermises"

Some show a few short spines. We'll sell these for less money.

4 to 5 ft.....10, \$2.25; 100, \$18.00

3 to 4 ft.....10, 1.50; 100, \$2.00

A few have reverted to type; long, stout thorns, but well shaped straight trees. 80, \$12.00

3 to 4 ft.....10, 1.00; 100, \$0.00

Our list offers western-grown Evergeens. Trees.

Our list offers western-grown Evergreens, Trees, Shrubs, Perennial specialties for western gardens.

FRANK M. RICHARD, JR.
O. Bex 363 Fort Collins, Colo.
Mile-high grown means better quality.

ORENCO NURSERY CO.

Orenco, Oregon WHOLESALE GROWERS

Fruit, Shade, Flowering Ornamental Trees, Fruit-tree Seedlings, Roses, Etc. Very complete line of quality stack Catalogue sent on request.

a nephew of G. E. Yerkes, of the United States bureau of plant indus-

The Willis Nursery Co., Ottawa, Kan., has been awarded a contract to landscape the grounds of the Franklin county courthouse. The project is the result of cooperative efforts of the city of Ottawa, the chamber of commerce and Franklin county.

Miss Mary McCandliss, who with her sister Rhea operates a landscape business at Topeka, Kan., has been seriously ill for more than a month, but is now recovering her health and is able to be up part of the time. The Misses McCandliss recently obtained some good advertising through a feature article in the Topeka Daily Capital about the winter care of ever-

T. Russell Reitz, Kansas director of the prairie states forestry project, has announced that the shelterbelt nursery at Manhattan will be discontinued, to be reëstablished at Abilene.

One of the finest things that could happen to the middle west was the snow which fell beginning February 27, covering the region from the Rockies to the Mississippi. This much-needed moisture, equal to onehalf to two inches of rainfall, has made nurserymen much more optimistic, as it is bound to result in increased planting.

The Chandler Landscape & Floral Co. was represented by an elaborate garden display at the better homes show held recently in Kansas City.

L. W. Patrick has recently started a retail nursery business at Waterloo,

The Wichita Nurseries, Wichita, Kan., have been awarded a contract to landscape the new school building at Eldorado, Kan.

Mr. and Mrs. John W. Sarber, of the Sarber Nursery, Topeka, Kan., are both seriously ill with influenza.

Bids will be opened March 17 for two roadside improvement projects in Wyandotte county, Kansas, the following nursery stock being specified: 112 Russian olive, 55 hackberry, 95 pin oak, 359 American elm, 118 Chinese elm, 94 Pfitzer juniper, 13 scopulorum juniper, 190 red cedar, 86 Austrian pine, 32 yellow pine, 209 Spiræa Vanhouttei, 275 Tamarix hispida, 55 Paul's Scarlet roses, 753 setigera roses.

FRUIT and SHADE TREE SEEDLINGS

Oregon and Washington Grown Apple, Pear, Mahaleb, Maszard, Myrobalan

Quince (rooted cuttings) Chinese Elm Scodlings

Complete Line General Nursery Stock. Chinese Elm, Transplanted Specimens. Norway Maple, Lining-out Whips.

Send list of your wants for prices. New catalogue now ready.

Combination carloads to eastern distributing points.

MILTON NURSERY CO.

A. Miller & Sons, Inc. Since 1878 Milton, Oregon

ILEX PERNYI

A slow-growing Holly from China, with small spiny leaves and bright

6 to 8 ins., 2-yr., 3-in. pots......25c 8 to 10 ins., 3-yr., 4-in. pots.......40c 10 to 12 ins., 3-yr., 4-in. pots.......45c

Catalogue mailed on request.

DOTY & DOERNER, Inc.

Portland, Oregon

New Rose TEXAS CENTENNIAL

(Red Hoover) Plant Patent No. 162

Ask for color illustration and prices.

Also for our general list of roses.

DIXIE ROSE NURSERY Tyler, Texas

PACIFIC COAST NURSERY

2244 N. Skidmore Court Portland, Ore.

We have a surplus of Massard, Mahaleb, Myrobalan, Quince, Pear and Apple seed-lings in all grades. Samples upon re-quest.

John Holmason, Prop.

Grade Count List Field-Grown ROSES Write for Copy

HOWARD ROSE CO. Hemet, California



Apple and French Pear Seedlings

No. 1, 87.00 No. 2, 85.50 No. I, 84.00 Apple and Pear grafts to order. Contract growers of seedlings and fruit trees.

INGALLS NURSERY CO.

New Books and Bulletins

FLOWERING SHRUBS.

Persons familiar with the publications of the Royal Horticultural Society will understand how interesting is the volume of 272 pages on "Ornamental Flowering Trees and Shrubs," which is a report of the conference held by the society in London, April 26 to 29, 1938. Papers containing experiences on growing these trees and shrubs, their uses in various aspects and their treatment as to propagation and pruning were circulated beforehand and taken as read; each author spoke shortly on his subject, illustrating it with lantern slides, and the audience was then invited to discuss it. The book issued by the society containing these papers, with illustrations, and the resulting discussions is an interesting and informative collection of material on flowering cherries, crabs, barberries, cotoneasters, viburnums, philadelphus, deutzia, lilacs, magnolias, camellias, sorbus, cydonia, cratægus and similar trees and shrubs. The volume is available from the secretary of the Royal Horticultural Society, London, for 10 shillings, 6

GARDEN OF LARKSPURS.

In a new book, "The Garden of Larkspurs," Dr. L. H. Bailey continues the series begun by "The Garden of Gourds" and "The Garden of Pinks" and provides a practical discussion of the uses and cultivation of all species of larkspur which have been found adaptable in the United States. More than 100 supposed species are accounted for. The method of approach is somewhat out of the ordinary, with the thesis being "to understand delphinium as a cultivated plant." Annual and perennial forms are included, five major groups being cited in as many chapters, as well as red larkspur, to which a special section is devoted.

Besides the factual information on soil, drainage, fertilizing and mulching, and location of beds, Dr. Bailey includes an important enumeration of 113 varieties and expert advice for those who wish to breed or hybridize larkspur. There is also a scale for judging larkspurs at flower shows.

A chapter on delphinium diseases

is contributed by Leon H. Leonian, editor for the American Delphinium Society. Another, on pests, is written by W. E. Blauvelt, of Cornell University, Ithaca, N. Y.

The book is illustrated with twenty-five decorative pen drawings and has a frontispiece and endpiece in color. There are 116 pages, including an index. Bound in blue cloth, the volume, which is published by the Macmillan Co., sells for \$3 per

DAFFODILS AND LILIES.

Two recent publications of the American Horticultural Society are the "American Daffodil Yearbook" and the "American Lily Yearbook," which may be obtained for 50 cents and \$1 per copy respectively, from the office of the secretary of the association, at Washington, D. C.

The daffodil publication is a 64-page booklet, attractively prepared, with splendid half-tone illustrations, of which sixteen are full-page, depicting

SHADE TREES ELM, AMERICAN
8 to 16 ft....
10 to 12 ft....
2 to 2½-in, cal.
2½ to 3-in, cal.
3 to 4-in, cal.
ELM, CHINESE
6 to 8 ft. ELM. CHINESE

\$ to 8 ft.

\$ to 10 ft.

\$ to 10 ft.

\$ to 20 ft.

\$ to 65.00 90.00 115.00 165.00 215.00 300.00 12.50 115.00 MAPLE. SILVER
8 to 10 ft.
10 to 12 ft.
11/2 to 2-in. cal.
2 to 2/2-in. cal.
2 to 2/2-in. cal.
2 to 2/2-in. cal.
2 to 2/2-in. CAROLINA
8 to 10 ft.
10 to 12 ft.
POPLAR, LOMBARDY
5 to 6 ft. 45.00 5 to 6 ft... 6 to 8 ft... 8 to 10 ft... 10 to 12 ft... Write for quotations on other varieties and sizes. Waynesboro Nurseries, Inc. Waynesboro, Virginia

Peach and Apple Trees

Several Hundred

Fine 2-year Apple, 11/16-in. up., \$15.00 per 100. Varieties: Turley, Yellow Delicious, Double Red Delicious, Grimes, Stay-man and Rome Beauty.

Fine 1-year Peach, 11/16-in. up., \$14.00 per 100. Varieties: Hale, Elberta, So. Haven. Ea. Elberta, Golden Jubilee, Red Bird.

This is all nice true-to-name stock and the last call to sell this stock.

GREEN RIVER NURSERIES

narcissus varieties. Of particular interest are the chapters headed "Season 1937 Notes," by Jan de Graaff; "Daffodils in a Long Island Garden," by James Esson; "Some Notes on the Jonquil Section," by Alfred Bates; Notes on Triandrus Hybrids," by B. Y. Morrison, president of the American Horticultural Society, and the proposals regarding revision of the R. H. S. narcissus classification.

The annual on lilies consists of 112 pages, bound in stiff boards, and, like the previous publication, is noteworthy for full-page half-tones supplemented by drawings. Of particular interest to lily growers will be the opening article, "Practical Considerations in the Control of Lily Mosaic," by L. H. McDaniels, who states that there is every reason to expect that a program of control can be worked out for the disease that will enable growers to live with it. Helen M. Fox contributes an article on "Lilies at Foxden," and in briefer fashion the same writer supplies notes on several special types. The book contains a bibliography on

Wanted in Quantity

Crategus Crus-galli, coccinea and cor-data, 3 to 4 ft., 4 to 5 ft. and up to 10 to 12 ft.

to 12 ft.
Carpinos Betulus, 5 to 6 ft. and larger.
Oak in large sizes.
Malus, 5 to 6 ft., 6 to 8 ft. and up.
Oriental Plane, 2-in. cal. and up to 5 to

Rosa in different species

Rosa in different species.
Cornus mas, bushy, 5 to 6 ft., 6 to 8 ft. and larger.
Viburoum prunifolium.
Rhamnus cathartica and Frangula.
Hippophae rhamnoides.
Elseagnus umbeellata.
Shepherdia.
Populus albu.
Rosa rugosa.

Rosa rugosa. Rosa rugosa alba and spinosissima.

Send lowest prices on what you have. Also ANY STOCK YOU HAVE TO OFFER OR WANT.

WILL BE IN THE MARKET FOR A LOT OF NURSERY STOCK THIS SPRING.

ARTHUR DUMMETT

DEALER IN NURSERY STOCK AT

61 W. Grand St., Mount Vernon, N. Y.

-BARGAINS!-BARGAINS! BARGAINS! HEDGE STOCK

Barberru! Barberru! Barberru! Privet! Privet! Privet! Yew, Hemlocks or What? We have it!

300 acres raring to go! Fine stock, nothing better! Wholesale quantities to dealers only. Special prices on carloads at nursery. It will pay to investigate!

GARDNER'S NURSERIES

Rocky Hill, Conn.

CARLOAD LOTS

ELM, American, Moline and Vase, up to 4 ins. All transplants. MAPLE, Norway, up to 3½ ins. Transplants, extra select, spaced

7x7 ft

POPLAR, Lombardy, up to 2 ins. WILLOWS, Thurlow, up to 3 ins. BARBERRY, Thunbergii, up to 2

SPIRÆA, Vanhouttei, up to 5 to 6 ft.

APPLE, 2-year.

CHERRY, 1-year. PEACH.

All of above items can be supplied in carload lots.

Send for list on many other items

C. M. HOBBS & SONS, INC. Bridgeport, Indiana

Largest Nursery in Indiana.

NU CROP CHINESE ELM SEED

Now booking

1	lb.		1.50	per	lb.
10	lbs.	***************************************	1.25	per	lb.
25	ibs.	***************************************	1.15	per	lb.
100	lbs.	***************************************	1.00	per	lb.

Order now.

THE BARTELDES SEED CO.

Denver, Colorado

IF YOU plant

Tennessee Natural Peach Seed

you will not be sorry. Reliable and Dependable. Write for prices on 1938 crop. 6000 to 7000 seeds to the bushel (50 lb.) Fruit Trees, Shade Trees, Ornamental Trees,

Shrubs and Evergreens

Southern Nursery & Landscape Co. Winchester, Tennessee

LAWN GRASS SEED

Select Recleaned

1	00 lbs.
Velvet Lawn Mixture	\$14.00
Kentucky Bluegrass, extra fine	13.50
Redtop, fancy silver seed	13.50
American Rye Grass	7.00

A. H. Hummert Seed Co. 2746-48 Chouteau Ave., St. Louis, Mo.

PEACH PITS

Our Pits Compare Favorably With the Best

HOGANSVILLE NURSERIES HOGANSVILLE, GEORGIA

lily writings, a reference to experimental projects under investigation and a list of lilies offered in catalogues, keved to their sources.

BULLETINS RECEIVED.

"Relation of Magnesium Deficiency in Grapefruit Leaves to Yield and Chemical Composition of Fruit," by B. R. Fudge, associate chemist, Florida agricultural experiment station, Gainesville, published as technical bulletin 331, January, 1939, tells the results of a 3-year study of yield and chemical composition of fruit and foliage of four varieties of grapefruit, as affected by various fertilizers. The conclusion reached was that applications of magnesium-bearing fertilizers will prevent bronzing and thereby reduce alternate bearing to a minimum.

"Soil Testing Methods," issued January, 1939, as circular 127 by the Connecticut agricultural experiment station, New Haven, and written by M. F. Morgan, discusses the Universal soil-testing system. The circular is a condensation and revision of bulletin 392, issued in 1937. The bulletin describes how to determine the nutrient conditions within the soil by means of comparatively simple tests. In order to obtain a representative test of a field or plot of ground, the sample of soil should be a thorough mixture of equal amounts of soil collected at twenty or more points fairly distributed over the land, including both high and low spots. The soil extracting solution used is a 0.5 normal solution of acetic acid which has been brought to a pH of 4.8 by the use of sodium acetic acid. The bulletin goes on to tell of the method of making the soil solution, reagents to use in tests for nitrate, ammonia, phosphorus, potassium, calcium, magnesium, aluminum as well as reagents to use for special tests, such as for iron sulphur, etc. Also discussed are the various procedures, equipment, interpretation of tests, application of tests to drainage water from soils and soil reaction

OBSERVATION is made that trees which had been fed by the barhole method for years resisted the New England hurricane much more successfully than those in the average lawn. The latter developed roots just below the surface, seeking the plant food supplied for the lawn, and consequently were without deep anchorage in the soil.





FOREST PLANTING STOCK REES \$5.75 per 1000 CHRISTMAS TREE PLANTING STOCK LINING-OUT STOCK Reduce Taxes on Idle Land. Write for descriptive circular and prices MUSSER FORESTS, INC., Indiana, Pa.

We are collectors of NORTHERN MINNESOTA TREE SEEDS

Pinus Barbaian Minnesuta TREE SEEDS

Pinus Barbaian Nack Pine
Pinus Resissas, Rad Pine
Pinus Res

North Dakota and Montana Seeds

Tree, Shrub and Flower Seeds Native flowering plants of North Dakota Badlands,

E. C. MORAN Garrison, Mont. Medora, N. D.

BURLAP SQUARES

Sizes 14 to 40 inches. Packed 500 per bale.

CHINESE TONKIN CANES

In 8 sizes, medium and heavy.

GRANULATED PEAT

Single bales to carloads.

HARDY GARDEN LILIES

RUBRUM MAGNIFICUM, AURA-TUM, ALBUM, REGALE, etc.

Always glad to quote-write us.

McHUTCHISON & CO.

95 Chambers St.

New York

WOOD LABELS

ORDER NOW Before Prices Advance

Per 1000
Plain Painted
Copper Wired (5 lbs. per 1000) ... \$4.70 \$2.10

DAHLIA LABELS (11/16 in. x 3½ ins.)
Heavy Copper Wired (5 lbs. per 1000) ... \$1.70 \$2.10

DAHLIA LABELS (11/16 in. x 3½ ins.)
Heavy Copper Wired (5 lbs. per 1000) 1.85 2.25

POT LABELS (111/16 in. x 3½ ins.)
1.70 2.10
6-in. (Cartons of 1000), 5 lbs. ... 1.70 2.10
6-in. (Cartons of 1000), 8 lbs. ... 2.50 3.10
6-in. (Cartons of 1000), 8 lbs. ... 2.50 3.10

BARDEN LABELS (111 1 in. wide)
8-in. (Cartons of 250), 16 lbs. ... 3.50 4.20
10-in. (Cartons of 250), 20 lbs. ... 4.35 5.30

BARDEN LABELS (111 1½ ins. wide)
12-in. (Cartons of 250), 27 lbs. ... 6.56 7.40

Above weights are per 1000 labels for computing Postage to your ZONE. No Cartons Broken.

Write for Complete Price List—PERMA-LABELS —Paper Wired Labels—Tags—Nursery Tape —Address Labels—Bubber Stamps, Inks. etc. PERMA TAG & LABEL CO.

Box M23 Creston Sta., Grand Rapids, Mich.

Protect Your Stock
Against Future Drought with
SKINNER OVERHEAD

IRRIGATION

40 years' experience—your guarantee of satisfaction

Overhead irrigation supplies now at greatly reduced prices Write for free literature

C. W. SKINNER & CO. Newfield - New Jersey

NURSERY TOOLS

Nursery Spades, Kunde Knives and Pruning Shears, Budding and Grafting Supplies. Free 38-page Catalogue.

A. M. LEONARD & SON Piqua - Ohio

For list of BOOKS ON TRADE SUBJECTS Write to AMERICAN NURSERYMAN

OBITUARY.

Louis U. Strassburger.

Louis U. Strassburger, who has served as president of the Outdoor Arts Co., Inc., Chestnut Hill, Philadelphia, Pa., for over twenty years, died March 7. His death, which came suddenly, was a great shock to his associates in the realm of horticulture as well as in the fraternal and other organizations with which he was actively affiliated.

A graduate of Rutgers College, New Brunswick, N. J., he had been actively engaged in landscape architecture and engineering for over forty years. His first assignment as engineer after leaving college was on the Duke estate, Somerville, N. J., where for the firm of Thomas Meehan & Sons he carried out many of the large engineering projects of that famous property.

During his life he was accorded high honors in Masonry and served as grand commander of the Knights Templar of Pennsylvania in 1937 and 1938.

Always interested in boy welfare, he held office as treasurer of the famous Boys' Club of Germantown, Philadelphia. He was also a leader in instituting the Order of De Molay for boys in Pennsylvania.

In his memory may I pay tribute. He was a man of wonderful ability, of integrity and of the highest ideals in life. Edwin Matthews.

George N. Titus.

George N. Titus, 71, retired nurseryman, Waynesboro, Va., died March 2 after a brief illness. He was a native of Nemaha, Neb., and was engaged in the nursery business there before going to Waynesboro in 1931. He organized the Titus Nursery Co. and in 1935 sold his interests to Waynesboro Nurseries, Inc.

Surviving Mr. Titus are his widow, Mrs. Amelia Nusbaum Titus, a sister and two brothers.

Julius J. Bonnell.

Julius J. Bonnell, Bryn Mawr, Wash., died of a heart attack February 27. He was 64 years old. Born in Hersin-Compigny, France, in 1875, Mr. Bonnell graduated from four horticultural schools in that country. When still young he was sent by the French government to visit the Pacific coast, where he made an extensive horticultural survey before returning home.

Send for BLUE-BOOK

New Catalogue of TREE SURGEONS' SUPPLIES

Tools and Labels
IMPLEMENTS
Spraying Equipment
FERTILIZERS
Insecticides
NURSERY SUPPLIES





Automatic Irrigation and Supplies

We can supply you anything you need.
Complete Irrigation Lines
Superior Outdoor Nozsles
Roller-bearing Hangers
Quiek-change Unions
Hand-turning Unions
Kalamasoo Oscillators
Drilling and Tapping Machines
Etc.

Write today for literature and prices

John Rust Mfg. Co. 628 W. Patterson St. Kalamazoo, Mich.





THE NURSERYMEN'S HAND TRUCK (Patent No. 110110) IS EQUALLY USEFUL TO



Price 827.50 F. O. B. Kansas City

Pacific Coast Nurservmen's Association, he was also a member of the Washington State Nurserymen's As-

sociation, the American Association

of Nurserymen and the Seattle cham-

ber of commerce. He also contributed much time and plant materials to

Besides aiding in the designing of

the Blaine peace portal on the Canadian border, Mr. Bonnell had charge

of all floral displays at the A. Y. P.

exposition and was in charge of land-

scaping the state capitol grounds at

Olympia. He was also actively interested in the University of Wash-

Mrs. Elizabeth Beaudry.

architect at Chicago until his retirement in 1920, died February 27, at

Los Angeles, Cal., at the age of 78.

Mrs. Elizabeth Beaudry, wife of William E. Beaudry, a landscape

Besides her husband, Mrs. Beaudry

is survived by a daughter, Mrs. Vic-

tor Mense, and a son, William A.

Beaudry, of William A. Beaudry &

Associates, Chicago, who traveled to

Los Angeles for the funeral services

various civic organizations.

ington arboretum.

THE BIG WHOLESAL

and

THE RETAILER

"Your Nurserymen's Hand Truck has been received, and I must say it is a dandy. It is the finest thing we ever had around our storage.

Mount Arbor Nurseries Shenandoah, Iowa By H. S. Welch

"Your Nurserymen's Truck is one of the handiest and best labor-saving tools I have ever used in the nursery business.

Durham Plant & Nursery Durham, North Carolina By J. T. Dunnegan

THE GARDEN SHOP, INC., 4819 Mission Road, Kansas City, Kan.

Returning to the United States in 1897, he built a small nursery in the Montlake district of Seattle. A year later he moved to Bryn Mawr. He made several trips to Europe and Asia to collect specimens of rare foreign plants. Twice president of the

cut flowers-rosebushes-shrubs-perennialsfor store and individual trade or retail mail orders-small fruits-counted seedlings-young plants-and so forth.

EASIER - NEATER - TEN TIMES QUICKER LINS TYING MACHINE COMPANY

COLCHICINE ALKALOID AMORPHOUS U. S. P. XI

Used in

Doubling Chromosomes

Available in the following sizes at your wholesale drug house:

1 ounce

15 grains

1/8 ounce

5 grains

MALLINCKRODT CHEMICAL WORKS

2nd and Mallinckrodt Sts. . . St. Louis, Mo 70-74 Gold Street . . . New York, N. Y.



Blades sharp on both edges—cuts forward and backward.

4" Open Hoe \$1.00 6" Open Hoe 1.20 8" Open Hoe 1.35 10" Open Hoe 1.35 10" Open Hoe 1.50 If not handled by your dealer, send Money Order to

ANDERSON OPEN HOE CO. 215 Oreas St., Seattle We pay the postage in U.S.A.

and burial March 1. W. D. Griffing.

W. D. Griffing, of Griffing's Interstate Nurseries, Macclenny, Fla., died February 26 at Miami. Born in New York, Mr. Griffing moved to Florida with his four brothers about 1885, where they started in the nursery busi-

As the south began to grow they extended their nursery holdings into Texas, Alabama and Mississippi. Each of these branch units were under the direction of one of the Griffing brothers. Later the death of one of the brothers brought about a revision of the properties. W. C. Griffing as-

ATTENTION NURSERIES WHAT CYPRESS WOOL DOES

AS A MULCH over newly planted seed beds, it is clean with no weed or grass seeds as from straw or hay. FOR DRY PACKING around the tops of plants, it is soft and keeps the stems from subblus together.

from rubbing together.

AROUND THE ROOTS it is far superior

AROUND THE ROOTS it is far superior

used for this purpose.

NURSERIES ACCLAIM this new proddaily from satisfied clients.
YOUR INQUIRIES INVITED: Better

EXCELSIOR MILLS CORP. P. O. Box 3236

JACKSONVILLE, FLA.



JUTE SISAL JAVA COTTON

Many other types also. Exactly the kind required in your work. sample of what you are using for quotations or tell us purpose and we'll recommend best type for your job. No obligations. Write for free booklet "Knots the Sailors Use." obligations.

GEO-B-CARPENTER & CO

sumed managership of the Texas nurseries, which he operates today as the Griffing Nurseries, Beaumont, Tex. W. D. Griffing, the oldest of the brothers, remained at Macclenny, Fla., where he operated the Griffing's Interstate Nurseries until the time of his death.

Mr. Griffing is survived by his widow, two adopted sons, Larry and John, and two brothers. Funeral services were held at Miami, February 28.

ARKANSAS NURSERY.

The Benton County Nursery Co., Rogers, Ark., was started in 1915 by T. J. Jacobs, who leased land for growing nursery stock in the vicinity of Rogers and maintained an office in his home. The business flourished, and in 1919 Mr. Jacobs built a packing shed and office. In 1932 he acquired his own land. At first he bought a few acres near Van Buren, but he soon began to concentrate on bringing his interests closer to Rogers, and he now grows stock on 500 acres near there. Recently the local newspaper devoted several columns to the story of the enterprise.

The office now occupied is situated on a 75-acre tract about one-half mile south of Rogers on U.S. highway 71. The building is 60x158 feet, of red brick, and houses eight office spaces and a double-deck packing and storage department. Located near the office is the seed department building. The grounds are landscaped and contain lily and fish ponds with underwater lighting. They are considered one of the show places of the Ozarks, attracting many tourists.

During the seasonal rush, in February and March, from sixty-five to eighty people are employed, and about twenty-five in the slack period. Over 200,000 copies are mailed of a catalogue listing over 2,200 different varieties of plants, seeds, shrubs, evergreens, trees, bulbs and vines. Last year the company shipped stock to thirteen foreign countries.

FOR PEACH BORER.

As more effective in controlling borers in peach trees, easier to apply, less dangerous to the tree and less expensive, ethylene dichloride is advocated by Dr. D. M. Daniel, entomologist at the New York state experiment station.

An emulsion of ethylene dichloride and potash fish-oil soap diluted with water is applied directly to the tree regardless of age. It can be poured or

sprayed about the base of the tree with equally good results and can be applied at a time when other orchard work is not pressing.

It is more effective in cool weather than in hot weather and can therefore be used later in the autumn than can the old treatment with paradichlorobenzene, which requires a soil temperature of 60 degrees or above to be effective. It appears to be safer on young trees as well as more effective than the so-called "crystal ring" treatment with "P. D. B."

SALESMEN WANTED

calling on hardware, nursery, cemetery trade, to sell nationally advertised "CENTRAL PARK LAWN GRASS SEED" on 10 per cent straight commission. State experience.

RADWAY McCULLOUGH SEEDS, INC. 115 Broad St., New York, N. Y.

FOR SALE

Modern retail nursery, southwestern Pennsylvania. 20 acres better variety evergreens under cultivation. Two branches; will sell separately.

Address No. 119, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

CLASSIFIED ADVERTISING

Peonies: Tree and Herbaceous, best varieties. Oberlin Peony Gardens, Sinking Spring, Pa.

CANNA BULBS.
Ten leading varieties, state inspected, certified and guaranteed satisfactory. Write for prices.
S. L. CALFEE, BRUNSWICK, GA.

Asparagus Mary Washington, rust-resistant strain, 1-yr. and 2-yr. roots. Best quality, careful grading, prompt ahipment, lowest prices. C. D. Wright, Hamburg, Iowa.

DAPHNE ODORA MARGINATA ROSEA.
Rooted cuttings ... \$8.00 per 100, \$70.00 per 1000
Out of 2½-in. pots. 10.00 per 100, 90.00 per 1000
R. P. RESSEL, MULINO, ORE.

TREES, SHRUBS AND PERENNIALS.
No charge for containers.
Write for free catalogued price list.
AMERICAN FORESTRY CO.,
Pembine, Wis.

Vegetable Plants, wholesale prices. Write for catalogue of Cabbage, Onion, Tomato, Pepper and other plants, with special price list to dealers, market gardeners and large buyers.
Pledmont Plant Co., Box 945, Albany, Ga.

ROOTS—ASPARAGUS, HORSE-RADISH,
RHUBARB.
We grow large acreage of graded stock for
wholesale buyers. Now booking orders for spring
delivery. Write us,
GEO. R. PEDRICK & SON,
Pedricktown, N. J.

JAPANESE SPURGE. (Pachysandra Terminalis.) Transplanted.

Strong plants, 6 to 8 ins., 3c. Strong plants, 8 to 10 ins., 31/2c.

D. HILL NURSERY CO., Dundee, III.

NORWAY MAPLE,
96 3-in. caliper, 25 ft. high.
63 2½-in. caliper, 20 to 25 ft. high.
139 1 to 2-in. caliper, 16 ft. high.
184 to 5-in. caliper, 25 ft. high.
30 3 to 4-in. caliper, 25 to 30 ft. high.
I would like to sell the whole block. If you need them, come and see them.
DIXON FLORAL CO., DIXON, ILL. HICK'S YEW

	8	р	е	e	и	u		0	me:	11	a I	Ding	-ou	t	-1	ВÌ	24	Вŧ	l.					
																						1	Ča.	ch
8,000									. 6	to	- 8	ins.	X.											5c
20,000									. 8	to	10	ins.	XX											8c
3,000									10	to	12	ins.	XX										.1	0c
3,000									12	to	15	ins.	XX										.1	5c
1,000					*		6.		15	to	18	ins.,	XX										. 2	0c
Ea	cl	4		×		1	n	d	ica	tes	0	ne t	ran	8	p	ls	E	ıŧ	fi	11	P.			
				Ī),		Ħ	Ī	LL	N	UR	SER	YC	1	Š.					•	•			
									Dt	ind	lee,	m.												

Table of Contents

Cartan Calan

Freedom of Trade Polygonum Auberti Setting a New High	2
Garden Supplies Provide Extra Pro (illus.) Ernst Nurseries (illus.)	3 ·
Show Plant Pictures (illus.) Long Island Club Day Outdoor Life Show	5 6
Polygonum and Some of Its Kin By C. W. Wood	7
Short Rows Plants Little Known in Nurseries By Willard N. Clute	9
Protect Oregon Azaleas New Patents	10
Special Train to Portland (illus.)	11
Sales Promotion By J. G. Bacher	14
Massachusetts Plans New Legislation	
Interstate Trade Barriers Meet on Trade Barriers	
Supreme Court Decree	
What Is Humus?	
New Jersey Notes	10
	14
Use of Plants from Nursery By Ben Blackburn Southern Tree Conference	20
Use of Plants from Nursery	20
Use of Plants from Nursery	20 22 23 23
Use of Plants from Nursery	20 22 23 23 24
Use of Plants from Nursery By Ben Blackburn Southern Tree Conference Low Texas Freight Rate Houston Radio Talk Analysing Advertising Gotham Fair Plantings	20 22 23 23 24 24
Use of Plants from Nursery By Ben Blackburn Southern Tree Conference Low Texas Freight Rate Houston Radio Talk Analysing Advertising Gotham Fair Plantings New York State News	.20 .22 .23 .23 .24 .24 .25
Use of Plants from Nursery By Ben Blackburn Southern Tree Conference Low Texas Freight Rate Houston Radio Talk Analysing Advertising Gotham Fair Plantings New York State News Coming Events —Central Plant Board	.20 .22 .23 .23 .24 .24 .25 .26 .26
Use of Plants from Nursery By Ben Blackburn Southern Tree Conference Low Texas Freight Rate Houston Radio Talk Analysing Advertising Gotham Fair Plantings New York State News Coming Events —Central Plant Board	.20 .22 .23 .23 .24 .24 .25 .26 .26
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising Gotham Fair Plantings. New York State News. Coming Events —Central Plant Board. —Landscape Meeting	20 22 23 24 24 25 26 26
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising Gotham Fair Plantings. New York State News. Coming Events —Central Plant Board. —Landscape Meeting Southwestern Notes	22 23 23 24 24 25 26 26 26
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising Gotham Fair Plantings. New York State News. Coming Events —Central Plant Board. —Landscape Meeting Southwestern Notes New Books and Bulletins.	22 23 23 24 24 25 26 26 26 26 28
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising. Gotham Fair Plantings. New York State News. Coming Events. —Central Plant Board. —Landscape Meeting. Southwestern Notes. New Books and Bulletins. —Flowering Shrubs. —Garden of Larkspurs.	22 23 23 24 24 25 26 26 26 28 28 28
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising Gotham Fair Plantings. New York State News. Coming Events. —Central Plant Board. —Landscape Meeting. Southwestern Notes New Books and Bulletins. —Flowering Shrubs. —Garden of Larkspurs. —Daffodils and Lilies.	22 23 23 24 24 25 26 26 26 28 28 28 28
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising. Gotham Fair Plantings. New York State News. Coming Events. —Central Plant Board. —Landscape Meeting. Southwestern Notes. New Books and Bulletins. —Flowering Shrubs. —Garden of Larkspurs. —Daffodils and Lilies. —Bulletins Received.	20 22 23 23 24 24 25 26 26 26 28 28 28 28 29
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising. Gotham Fair Plantings. New York State News. Coming Events. —Central Plant Board. —Landscape Meeting. Southwestern Notes. New Books and Bulletins. —Flowering Shrubs. —Garden of Larkspurs. —Daffodils and Lilies. —Bulletins Received.	22 23 23 24 24 25 26 26 26 26 28 28 28 28 29 30
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising Gotham Fair Plantings. New York State News. Coming Events. —Central Plant Board. —Landscape Meeting. Southwestern Notes New Books and Bulletins. —Flowering Shrubs —Garden of Larkspurs. —Daffodils and Lilies. —Bulletins Received Obituary. —Louis U. Strassburger.	.20 .22 .23 .24 .24 .25 .26 .26 .26 .28 .28 .28 .28 .29 .30 .30
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising Gotham Fair Plantings. New York State News. Coming Events. —Central Plant Board. —Landscape Meeting. Southwestern Notes. New Books and Bulletins. —Flowering Shrubs. —Garden of Larkspurs. —Daffodils and Lilies. —Bulletins Received. Obituary. —Louis U. Strassburger. —George N. Titus. —Julius J. Bonnell.	22 23 23 24 24 25 26 26 26 26 28 28 28 28 29 30
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising. Gotham Fair Plantings. New York State News. Coming Events. —Central Plant Board. —Landscape Meeting. Southwestern Notes. New Books and Bulletins. —Flowering Shrubs. —Garden of Larkspurs. —Daffodils and Lilies. —Bulletins Received. Obituary. —Louis U. Strassburger. —George N. Titus. —Julius J. Bonnell. —Mrs. Elizabeth Beaudry.	22 23 23 24 24 25 26 26 26 28 28 28 28 29 30 30
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising. Gotham Fair Plantings. New York State News. Coming Events. —Central Plant Board. —Landscape Meeting. Southwestern Notes. New Books and Bulletins. —Flowering Shrubs. —Garden of Larkspurs. —Daffodils and Lilies. —Bulletins Received. Obituary. —Louis U. Strassburger. —George N. Titus. —Julius J. Bonnell. —Mrs. Elizabeth Beaudry.	22 23 23 24 24 25 26 26 26 28 28 28 28 29 30 30 30
Use of Plants from Nursery By Ben Blackburn Southern Tree Conference Low Texas Freight Rate Houston Radio Talk Analysing Advertising Gotham Fair Plantings New York State News Coming Events —Central Plant Board —Landscape Meeting Southwestern Notes New Books and Bulletins —Flowering Shrubs —Garden of Larkspurs —Daffodils and Lilies —Bulletins Received Obituary —Louis U. Strassburger —George N. Titus —Julius J. Bonnell —Mrs. Elizabeth Beaudry —W. D. Griffing Arkansas Nursery	.20 .22 .23 .24 .24 .25 .26 .26 .26 .28 .28 .28 .29 .30 .30 .30 .30 .31
Use of Plants from Nursery By Ben Blackburn Southern Tree Conference Low Texas Freight Rate Houston Radio Talk Analysing Advertising Gotham Fair Plantings New York State News Coming Events —Central Plant Board —Landscape Meeting Southwestern Notes New Books and Bulletins —Flowering Shrubs —Garden of Larkspurs —Daffodils and Lilies —Bulletins Received Obituary —Louis U. Strassburger —George N. Titus —Julius J. Bonnell —Mrs. Elizabeth Beaudry —W. D. Griffing Arkansas Nursery For Peach Borer	.20 .22 .23 .24 .24 .25 .26 .26 .28 .28 .28 .28 .28 .29 .30 .30 .30 .31 .31 .32 .32
Use of Plants from Nursery. By Ben Blackburn Southern Tree Conference. Low Texas Freight Rate. Houston Radio Talk. Analysing Advertising. Gotham Fair Plantings. New York State News. Coming Events. —Central Plant Board. —Landscape Meeting. Southwestern Notes. New Books and Bulletins. —Flowering Shrubs. —Garden of Larkspurs. —Daffodils and Lilies. —Bulletins Received. Obituary. —Louis U. Strassburger. —George N. Titus.	.20 .22 .23 .24 .24 .25 .26 .26 .26 .28 .28 .28 .28 .28 .29 .30 .30 .30 .30 .31 .31

ATTENTION **NURSERYMEN!**

Spray with, and recommend.



IMP. SOAP SPRAY

Use 1 part with 25 to 40 parts of water

Ask your nearest seedsman, or write for literature.

THE AMERICAN COLOR AND CHEMICAL CO. 176 Purchase St.

NURSERY DIP-WAX

A triple-base scientifically blended elas-tic paraffin wax for the coating of dormant nursery stock, chiefly roses. The best horticultural wax yet developed for modern dipping purposes. Safest, surest, yet cheapest protective coating.

WRITE NOW FOR PRICES, stating quantities wanted.

Manufactured by

WALTER E. CLARK & SON Milford, Conn.

Headquarters for Grafting Waxes, Pruning Compounds and Dressings.

—Pruning, Grafting,— Budding Tools—Knives

Saws, Shears, Hand and Pole Pruners, Jones Patch Budders, Waxes, Wax Melt-ers, Raffia, Rubber Budding Strips, Medi-cated J. & J. Nursery Tape, Tree Seal, Tree Kote, Tree Surgeon Supplies, Lad-ders, Sava-tree, Hormodin.

ders, Sava-tree, Hormodin.

Sprayers, Dusters, Materials

Power and Hand Sprayers. Spray Materials and Dust Mixtures. Hand and Rows. Rade Markers. Sprayer Accessories, Weed Killers. Wood Passervaties. Weed Killers. Wood Passervaties. Hyprometers and Magnifiers. No general catalogue. State your requirements for prompt cash quotations: no obligation. Address

EDWIN C. TYSON Wholesale and Retail Flora Dale, Pa.

PATENTS

All types of Patents procured, including plant patents . . . I can furnish copies of Plant Patents issued to date (in color) covering FLOWERS, VEGETABLES, FRUITS and TREES.

Send me sketch, picture or model of your new invention. I will give you prompt report on its probable patentability based on a search of the patent records, for a

Time counts in patent matters. Act now!

GEORGE E. COOK

REGISTERED PATENT ATTORNEY

International Bldg. Washington, D. C.

ACME GRAFTING COMPOUND

A new grafting compound endorsed by Michigan State College. Moderately priced and applied cold with a brush. Used also as a protective coating for injury. We can also supply Hand and Brush grafting wax and wax heaters. Bend for price list. Special prices in quantity lots to nurserymen. M. H. Hunt & Son, 510 N. Cecdar St. Lunning, Mich.

CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in the American Nurseryman.]

Chase Nursery Co., Chase, Ala.-Bulletin of eleven pages as spring surplus list includes deciduous shrubs, lining-out stock, vines and broad-leaved evergreens.

Gillett Fern & Flower Farm, Inc., Southwick, Mass.—An 8-page pocket-size book-let as wholesale trade list. Included are rhododendrons, wild flowers, azaleas and ferns. Retail catalogue includes same stock and is well illustrated.

E. C. Moran, Medora, N. D.-Mimeo-graphed sheet of wholesale offerings for spring 1939, junipers and native flowering plants

Griffing Nurseries, Beaumont, Tex.—A 32-page catalogue as Griffing's landscape book for 1939. This well illustrated catalogue lists a general line of nursery stock and materials native to the south.

E. W. Townsend & Sons, Salisbury, Md.—A 48-page catalogue featuring Townsend's strawberry plants. Also cluded are fruit trees and small fruits.

Buntings Nurseries, Inc., Selbyville, Del. — Pocket-size price list of nursery stock for spring of 1939. Listing includes fruit trees, small fruits, perennials, shrubs, vines, broad-leaved evergreens and lining-

Carl S. English, Jr., Seattle, Wash.— Five mimeographed sheets listing native seeds from the Pacific northwest.

Rhode Island Nurseries, Newport, R. I. -Pocket-size catalogue of twenty-four pages as wholesale price list for spring 1939 of a line of general nursery stock.

Empire Nursery & Orchard, Baileyton, Ala.—Printed folder as wholesale trade list of fruit trees, ornamentals, lining-out stock and peach pits.

THE Bryant Nursery, 3045 North Central avenue, Phoenix, Ariz., has been purchased by J. A. Berridge, Jr.

THE Parkersburg Nurseries Co., Parkersburg, W. Va., has been incorporated, with \$10,000 capital. Claude W. Crawford, C. A. Ruf and W. G. Peterkin, all of Parkersburg, are the incorporators.

W. L. FULMER, Seattle, Wash., president of the Washington State Nurserymen's Association, returned recently from a trip to the Hawaiian Islands. He reports that he spent an enjoyable six months.

R. D. UNDERWOOD, president of the Jewell Nursery Co., Lake City, Minn., is undertaking what he has long wished, but been unable to do, make a personal visit to numerous customers of the firm. He has started on a tour through Michigan, Ohio and Indiana, accompanied by his son, Julian M. Underwood, who is interested with his father in perpetuating the 70-yearold business.

SUCCEED IN LANDSCAPING

Get paid for being original

Workers in nurseries can increase their earnings through study with the American Landscape School. Ambitious men are asking themselves, "What will I be doing a year from today?" They want to move on up. They want to increase their ability to serve the world more largely. crease their more largely.

By studying at home in spare time hundreds of nursery workers have trained themselves to sell nursery stock with increased income and more hope -with increased income and more nope for the future. By adding to their pres-ent knowledge of plants, instruction in landscape gardening, planning the land-scaping of homes, estates, subdivisions, cemeteries, etc., they can push their pay upward. They are more valuable em-players.

These home lessons cover every problem of landscaping, and we help you with any difficulties that arise.

Investigate this opportunity. Course has been thoroughly tested. Start your upward climb today. Ten men in one nursery in Nebraska took the course—to their profit. Send a postal today for catalogue.

AMERICAN LANDSCAPE SCHOOL

6064 Grand Avenue Des Moines, Iowa

FLAME-GUN DESTROYS WEEDS Does Work of 4 Men

Hauck Kerosene Flame-Gun-2000°F. controlled hear—quickly...easily...economically destroys weeds (seeds and all), brush, other objection-able growths. Keeps roadways, fences, irrigation ditches, orchards, etc., clean. Hun-

dred and one uses. Inexpensive— Safe—Easy to use. Pays for itself in time and money saved. 10 day Free Trial. Write for Free literature and special introductory price.

HAUCK MFG. CO. **136 TENTH STREET** BROOKLYN, N.Y.

FREE VALUABLE FOLDER-WRITE TODAY!

LABELS FOR NURSERYMEN

THE BENJAMIN CHASE COMPANY DERRY, N. H.

CLARK GARDNER NURSERIES

Osage, Iowa

Originators of patented SEMI-POT-TED PLANT AND BULB PACKAGE for over-counter trade. Has WATER-ING TUBE and other unique features.

STANDARD GARDEN TRACTORS & Plow Powerful Gas Tractors for Small Far Seed Gardeners, Florists, Nurseries, Cultivate Fruit Growers, Poultrymen, 18 2 Cylinders and Lawns High Wheels, Rubber or Steel Tires, Walk or Ride Do Belt Work-Free Casalog Powerful Gas Tractors for Small Farms, Gardeners, Florists, Nurseries, Fruit Growers, Poultrymen.

STANDARD ENGINE CO.
Minneapolis, Minn.
4034 Como Ave.

Philadelphia, Pa.
2860 Market St.

NewYork, N.Y.
2860 Market St.

302 Cedar St.

FOR YOUR OWN USE--AND FOR RESALE!



Professionals everywhere prefer "Snap-Cut" Pruners for their easier, cleaner cutting action. "Snap-Cuts" won't tire

cutting action. "Snap-Cuts" won't tire hands; won't injure bark.
Your organization should use "Snap-Cut" Pruners. You can make extra profits selling them — especially with this special Sales Deal, featuring a complete assortment of these famous "Snap-Cut" Pruners in a wide price range. "Snap-Cuts" are the best value on the market today—the most efficient pruners ever known. See what you get for your money—

your money—

	Contains:		Retail Value Each	Retail	Dealer Cost
2	ORIGINAL "Snap-Cut" Pruners	119	\$2.00	\$4.00	\$2.67
3	SPECIAL "Snap-Cut"		*****		
9	Pruners	19	1.50	4.50	3.00
	Pruners	9	1.00	2.00	1.33
	PrunerNo.	118	1.25	1.25	.83
1	"Snap-Cut" Flower Picker and Pruner	128	1.80	1.50	FREE
		200	*****		
				\$13.25	\$7.8

This complete Sales Deal is packed as a unit that can be reshipped. In ordering, just say "Send Special Sales Deal No. 99" (shipped 6 deals in a carton—weight 6% pounds per deal).

ORDER NOW THIS SPECIAL DEAL ON



SEYMOUR SMITH & SON, INC. OAKVILLE, CONN.



For killing and preventing growth of wood destroying fungi and for protection of wounds. Easily applied with ordinary paint brush. Retains liquid consistency under freezing temperatures.

Attractive Counter Dis-play contains aix ½ pts. five pts., four qts., priced. \$4.75; resale value, \$7.05.

Bartlett Mfg. Co. 3058 E. Grand Blvd. Detreit, Mich.

SPECIAL OFFER 80-page Nursery Salesman's Plate Book 75c in full cloth

Process Color Printing Co. 701 Searle Bldg. Rochester, N. Y.

INDEX TO ADVERTISERS

Aeroil Burner Co.	30
Alta Vista Nurseries American Color and Chemical C	23
American Color and Chemical C	0. 3
American Florist Supply Co.	30
American Forestry Co	3
Anderson Onen Hoe Mfg. Co.	3
Andrews Nursery	25
Ariens Co.	35
Bailey Nurseries, J. V.	23
Barteldes Seed Co.	29
Bartlett Mfg. Co	34
Bay State Nurseries, Inc.	22
Bear Creek Evergreen Nursery Bents Nurseries, W. A	25
Sobbink & Atkins	
Bountiful Ridge Nurseries	25
Burr & Co., C. R.	25
Burr & Co., C. R.	19
Calfee, S. L.	32
Calfee, S. L. Carpenter & Co., Geo. B.	31
Chase Co. Benjamin	33
Clark & Son, Walter E. Clarke & Co., W. B. Cloverset Flower Farm.	33
Clarke & Co., W. B.	18
Congdon Nursery, H. E.	25
Cook, George E.	33
Cook's Nurseries	21
Cottage Gardens	23
Dixie Rose Nursery	27
Dixon Floral Co.	
Doty & Doerner, Inc.	27
Dummett, Arthur	28
Dunlap Nurseries	19
Empire Nursery and Orchard	21
Evergreen Nursery Co.	23
Excelsior Mills Corp.	31
Fairmount Farm	25
Fairview Evergreen Nurseries	21
Felins Tying Machine Co	
Forest Nursery Co	15
Foster Nursery Co.	25
Fox Nursery	
Freser Nurseries, Inc.	24
Garden Shop, Inc. Gardner Nurseries, Clark	31
Gardner Nurseries, Clark	33
Gardner's Nurseries	28
Gravely Mfg. Co. Great Northern Railway	30
Green River Nurseries	28
Harmon Nursery	21
Hauck Mfg. Co. Herbst Bros.	19
Hess' Nurseries	19
	23-32
Hobbs & Sons, C. M.	29
Hogansville Nurseries	29
Holton & Hunkel Co.	23
House of Gurney, Inc. Howard Rose Co.	27
Howard Rose Co.	25
Howard-Hickory Co. Hummert Seed Co. A. H.	29
Independence Nurseries, Inc.	24
Industrial Tabe Corp.	30
Ingalls Nursery Co.	27
Jackson & Perkins Co.	
Johnson, F. L.	
Kallay Bros. Co.	
Kemp Mfg. Co.	30
Kingsville Nurseries, Inc.	17
Koster Co., Inc.	19

William Manager Land	
Krider Nurseries, Inc. Krieger's Wholesale Nursery	23 25
LaBars' Rhododendron Nursery	
Lake's Shenandoah Nurseries	14
Leonard & Son, A. M.	30
Le Poire, Henry	23
Lewis Nurseries, Inc.	15
Lovett, Lester C.	19
Mallinckrodt Chemical Works	
Maloney Bros. Nursery Co	25
Mathews Eggert Nursery	21
McGill & Son, A.	27
McHutchison & Co.	30
McIlhenny, E. A. Meehan Co., Thomas B. Meehan & Sons, Inc., J. Franklin	17
Meenan Co., Inomas D.	21
March & Co	26
Milton Nussess Co	27
Minneapolis Plant Co	29
Moran F C	29
Milton Nursery Co. Minneapolis Plant Co. Moran, E. C. Mount Arbor Nurseries	16
Musser Forests, Inc.	29
Nagle's Nursery Natorp Co., W. A.	22
Natorp Co., W. A.	21
Oberlin Peony Gardens. Offenberg Nursery Co., Paul Orenco Nursery Co. Owen & Son, Inc., T. G.	32
Offenberg Nursery Co., Paul	21
Orenco Nursery Co	27
Owen & Son, Inc., T. G.	23
Pacific Coast Nursery	
Pacific Coast Nursery	22
Pedrick & Sons, Geo. R.	32
Perma Tag & Label Co	30
Peterson & Dering, Inc.	20
Piedmont Plant Co.	32
Porter, Inc., Fl. K.	27
Principal Wholesale Nursery Co.	10
Porter, Inc., H. K. Portland Wholesale Nursery Co. Prince:on Nurseries Process Color Printing Co.	24
Quality Nurseries	15
Rambo's Wholesale Nurseries, L.	1 25
Passal P P	32
Ressel, R. P. Richard, Frank M., Jr.	
	27
Riverside Nurseries Inc.	27
Riverside Nurseries, Inc.	20-25
Riverside Nurseries, Inc.	20-25
Riverside Nurseries, Inc	19
Riverside Nurseries, Inc	20-25 19 20 30
Riverside Nurseries, Inc	20-25 19 20 30
Riverside Nurseries, Inc	20-25 19 20 30
Riverside Nurseries, Inc	20-25 19 20 30 25 23
Riverside Nurseries, Inc	20-25 19 20 30 25 23 23
Riverside Nurseries, Inc	20-25 19 20 30 25 23 23
Riverside Nurseries, Inc	20-25 19 20 30 25 23 23 25 23
Riverside Nurseries, Inc	20-25 19 20 30 25 23 25 23 25 23 27 35 30 34 29
Riverside Nurseries, Inc	20-25 19 20 30 25 23 25 23 25 27 35 30 34 29
Riverside Nurseries, Inc	20-25 19 20 30 25 23 23 25 23 27 35 30 34 29 33 31
Riverside Nurseries, Inc	20-25 .19 .20 .30 .25 .23 .25 .23 .27 .35 .30 .34 .29 .33 .17
Riverside Nurseries, Inc	20-25 19 20 30 25 23 25 23 27 35 30 34 32 31 27 35 30 31 31 32 32 33 34 32 32 32 32 32 32 32 32 32 32
Riverside Nurseries, Inc	20-25 19 20 30 25 23 25 23 27 35 30 34 32 31 27 35 30 31 31 32 32 33 34 32 32 32 32 32 32 32 32 32 32
Riverside Nurseries, Inc	20-25 19 20 30 25 23 23 25 23 27 35 30 34 29 33 17 20
Riverside Nurseries, Inc	20-25 19 20 30 25 23 23 25 27 27 35 30 34 29 20 31 17 20 21 31 31 31 31 31 31 31 31 31 3
Riverside Nurseries, Inc	20-25 19 20 30 25 23 25 23 27 35 30 34 34 29 33 31 40 29 31 31 31 31 31 31 31 31 31 31
Riverside Nurseries, Inc	20-25 19 20 30 30 25 23 27 35 23 27 35 30 40 29 20 23 31 17 20 23 33 17 27 28 29 29 20 20 20 20 20 20 20 20 20 20
Riverside Nurseries, Inc	20-25 19 20 30 25 23 25 23 25 23 25 30 34 32 27 35 30 31 31 31 31 31 31 31 31 31 31
Riverside Nurseries, Inc	20-25 199 20 30 25 23 25 23 25 23 25 23 35 30 34 32 29 20 31 31 32 33 35 36 37 37 37 38 38 38 39 30 30 30 30 30 30 30 30 30 30
Riverside Nurseries, Inc	20-25 19 20 30 25 23 23 25 23 27 35 30 34 49 20 22 33 31 17 20 23 33 17 20 23 23 25 27 35 30 30 30 30 30 30 30 30 30 30
Riverside Nurseries, Inc	20-25 19 20 30 25 23 23 25 23 27 35 30 34 49 20 22 33 31 17 20 23 33 17 20 23 23 25 27 35 30 30 30 30 30 30 30 30 30 30
Riverside Nurseries, Inc	20-255
Riverside Nurseries, Inc	20-255
Riverside Nurseries, Inc	20-25
Riverside Nurseries, Inc	20-25

To simplify the rooting of cuttings—

MERCK ANNOUNCES

HORMODIN POWDER

IN THREE STRENGTHS

Designed to cover the full propagating range with a "one-dip" treatment

POWDER NO. 1 Designed primarily for use on sensitive species such as carnations, chysanthemuns, poinsettia, rose, etc. Many house, garden and greenhouse plants are included in the complete lait.

POWDER NO. 2 Designed for use on less sensitive species, which comprise many of the semi-woody types, and many of the common shrubs.

POWDER NO. 3 Designed for use on less sensitive species, which comprise most of the evergreens, and such plants as prives, hibiacus, commercial fruiting apple, and the flowering crabs.

The treatment of cuttings with Hormodin Powder is a simple procedure. The cutting is first dipped in water to moisten this stem, then dipped into the powder before being placed in the propagating medium.

MERCK & CO. Inc. Manufacturing Chemistis RAHWAY, N. J.

Philadelphia: 916 Parrish St.

Powder No. 1-10 (20, pig. each \$ 3.00 11 his neach \$4.00 11 his ne

A COMPLETE LINE of

BURLAP and CREPED WATERPROOF PAPER

in Rolls, Sheets, Strips standard widths and weights

AMERICAN SACK CORPORATION

329-331 W. 24th Place Chicago, Illinois

If it's burlap we have it

J. Shore & Company

Largest manufacturers and importers of Domestic and Dutch Burlap Squares and Rope.

> 101-103 Second Street CHELSEA, MASS.

A COMPLETELY PULYERIZED LEVEL SEED BED One OPERATION AT Lower COST



Ariens-Tiller pays for itself in time and money saved—the ideal tillage combine for nurserymen. Once over the ground does the job—no plow sole—no large chunks of soil to retard plant growth. 3 models to meet all re-quirements. Write for complete information and name of nearest distributor so you may see it.

ARIENS CO., Box 710, Brillion, Wisconsin

ARIENS-Tiller



AMERICAN TILLAGE COMBINE

Please Mention the AMERICAN NURSERYMAN when writing advertisers

Would improvements in stand from ranging from 65% to 75% interest you?

These results actually have been obtained and are not uncommon according to letters received from nurserymen. This famous tape is harmless yet offers protection against parasitic infection. Effective and dependable in reducing knots and malformations among pieceroot grafts. A spiral wrapping forms an air-tight covering that decomposes before any danger of girdling arises.

Increase your profits with Nurseryman's Tape. Send for samples and prices.

URSERYMAN'S TAPE!

INDUSTRIAL TAPE COPORATION

NEW BRUNSWICK, N. J.





CLOVERSET POTS

Help You Grow Better Stock Help You Make More Profit Bring Your Business Up to Date

> For Roses, Perennials, Chrysanthemums, **Shrubs, Vines and Fruit Trees**

CLOVERSET POTS ARE MADE OF ASPHALT IMPREGNATED FIBER STOCK

They are durable They are durable enough to permit growing your plants in them the entire growing season.

They are light They are light enough (they weigh only 1/20 as much as a clay pot of equal soil capacity) to be easily handled.

They do not dry out They are non-porous, which means they will not dry out quickly on hot or windy days, and therefore do not require constant watering as does a clay pot.

They make the plant look larger and better They are so appearance that they add to the attractiveness of the plant grown in them.

Large soil capacity They are large enough to comfortably accommodate the roots in a natural position of any No. 1 Rose Plant and all the most samble size shrubs and small trees.

They are cheap in price They are so cheap that they can be given away with the plant which insures the safe arrival, in first-class condition, of the plant grown in them, to its final destination.

They make the nursery business an all summer business They permit the nursery business an all summer business. They permit the nurseryman to extend his selling season from early spring through the summer and fall, and to plant Roses and other nursery stock grown in them even in the hottest summer weather, without the least sign of wilt of either the foliage or the blooms.

You can sell your plants in bloom By growing your stock in our pots you may sell it in full foliage and in Full Bloom, when it will command the best price, and most profits.

They eliminate cut-rate competition The use of our Cloverset Fots will enable you to eliminate the competition of the cut-rate drug and department stores, who cannot sell nursery stock in these big pots on account of the excessive weight and the expense of handling.

Send us a sample order Give them a trial and you will always use them.

Send us your order with your remittance, \$13.50 for 300 pots, 100 each of 3 sizes, or send for full information about sizes, prices and testimonials from users of our pots.

Carton of samples, by mail for 25c to pay postage

CLOVERSET FLOWER FARM, 10520 Broadway Kansas City, Mo.